

THE MISSISSIPPI DOCTOR

VOLUME 6

BOONEVILLE, MISSISSIPPI, FEBRUARY 1929

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NOV 12 1931



"The Country Doctor"

You knew him by his muddy shoes,
His clothes of last year's style;
The weary look about him,
The sweetness of his smile.

You knew him when the school let out,
Seeing the children flock
To get his cheery greeting,
And shout their "Hello, Doc!"

You knew him, too, at midnight,
When he rode through sleet and rain;
Wading through mud and water,
To reach your bed of pain.

You knew him in the dawning,
Still sitting by your bed;
In damp clothes—Oh, so patient,
His hand upon your head.

He was never in a hurry,
When kindly word could cheer;
The little jokes he saved for you
Are memories, now, dear.

He didn't fall in Flanders Field,
Where crimson poppies grew;
He wore himself out, waiting
On folks like me and you.

He has no cross in Flanders Field,
'Mid poppies' crimson hue;
His cross is in the aching hearts
Of folks like me and you.

You are cordially invited to attend the 45th Annual Convention of

The Tri-States Medical Association

— of —

Mississippi, Arkansas, Tennessee

Hotel Peabody, Memphis, Tenn., February 6-7-8, 1929

Wednesday, February 6th

- 9:00 A.M. The Treatment of Partum Hemorrhage—
Dr. George Gellhorn, Prof. Obst. and Gyn.,
St. Louis Univ. School of Med., St. Louis, Mo.
- 10:00 A.M. Clinical and Microscopical Observations in Diseases of the Blood—
Dr. John H. Musser, Prof. Med., Tulane Univ.,
New Orleans, La.
- 11:00 A.M. Neurology in Medical Practice—
Dr. Chas. Metcalf Byrnes, Assoc. in Clin.
Neur., Johns Hopkins Univ., Baltimore, Md.
- 1:00 P.M. Review Exhibits—
- 2:00 P.M. The Interpretation of Pain in Pericarditis and Pleuro-Pericarditis—
Dr. Joseph A. Capps, Clin. Prof., Med., Rush
Med. Coll., Chicago, Ill.
- 3:00 P.M. The Management of Lesions of the Stomach and Duodenum—
Dr. Donald C. Balfour, Prof. Surg. Univ.
Minn., Grad. Sch. Med., Rochester, Minn.
- 4:00 P.M. The Diagnosis of Pulmonary Tuberculosis for the General Practitioner—
Dr. Lawrason Brown, Med. Dir. Trudeau San.,
Saranac Lake, N. Y.
- 7:00 P.M. Review Exhibits.
- 8:00 P.M. Our Changing Knowledge of Eczema—
Dr. William A. Pusey, Emer. Prof. Derm.,
Univ. Ill., Coll. Med., Chicago, Ill.
- 9:00 P.M. Contrasting Values of Surgery and Radiation in Treatment of Cancer—
Dr. George W. Crile, Emer. Prof. Surg., West-
ern Reserve Univ., School of Med., Cleveland,
Ohio.

Thursday, February 7th

- 9:00 A.M. Problems Relating to Urinary Retention—
Dr. William E. Lower, Assoc. Prof. Gen. Ur.
Surg., Western Reserve Univ., School of Med.,
Cleveland, Ohio.
- 10:00 A.M. Diagnosis and Treatment of Common Allergic Diseases—
Dr. Ray M. Balyeat, Oklahoma City, Okla.
- 11:00 A.M. A Review of Our Present Knowledge of the Causes and

Treatment of Sterility—

- Dr. Barton Cook Hirst, Prof. Obst., Univ.
Penn., Philadelphia, Pa.
- 1:00 P.M. Review Exhibits.
- 2:00 P.M. Business Session and Election of Officers—
- 3:00 P.M. Problems in Diagnosis—
Dr. Harvey G. Beck, Prof. Med., Univ. Mary-
land School Med., Baltimore, Md.
- 4:00 P.M. Intestinal Parasitosis as Seen in the Temperate Zone—
Dr. Frank Smithies, Prof. Med., Univ. Ill.,
Coll. Med., Chicago, Ill.
- 5:30 P.M. Review Exhibits—
- 6:15 P.M. Dinner at Hotel Peabody—
President's Address—
- 7:30 P.M. Fads and Quackeries in Medicine—
Dr. Morris Fishbein, Ed. Jour. A. M. A., Asst.
Clin. Prof. Med., Rush Med. Coll, Chicago, Ill.
- 8:30 P.M. A Medical Adventurer in China—
Dr. Harvey J. Howard, Prof. Ophthalm.,
Washington Univ., St. Louis, Mo.

Friday, February 8th

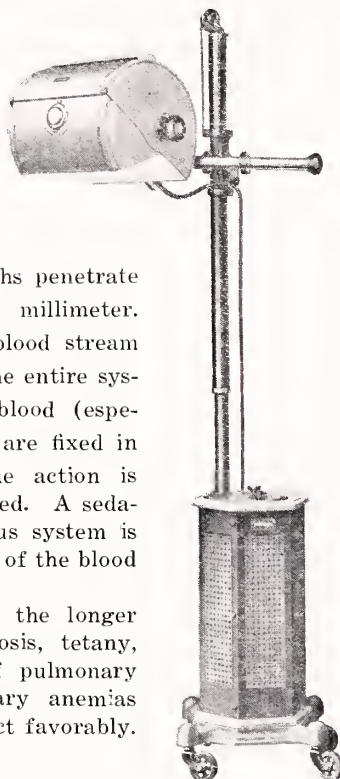
- 9:00 A.M. Some Practical Points in the Home Treatment of Tuberculosis—
Dr. Kennon Dunham, Assoc. Prof. Med., Univ.
Cin. Coll. Med., Cincinnati, Ohio.
- 10:00 A.M. Arthritis from the Standpoint of the Orthopedic Surgeon with Special Reference to Ankylosis—
Dr. W. R. MacAusland, Boston, Mass.
- 11:00 A.M. Diagnosis of Common Bone Diseases in Children with Special Reference to Rickets, Syphilis and Scurvy—
Dr. Arthur C. Christie, Prof. Roent., Geo.
Washington Univ. Med. Sch., Washington, D.C.
- 1:00 P.M. Review Exhibits
- 2:00 P.M. Arthritic Pain in Relation to Weather Changes—
Dr. Leonard G. Rowntree, Prof. Med., Univ.
Minn., Grad. School Med, Rochester, Minn.
- 3:00 P.M. What May Be Expected from the Removal of Tonsils in Children—
Dr. A. Graeme Mitchell, Prof. Ped., Univ.
Cln., Coll. Med., Cincinnati, Ohio.
- Review Exhibits.

DR. A. F. COOPER, Secretary-Treasurer,
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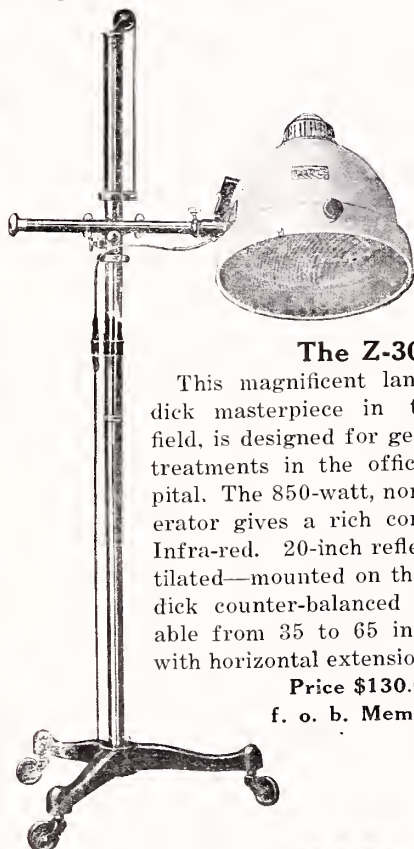
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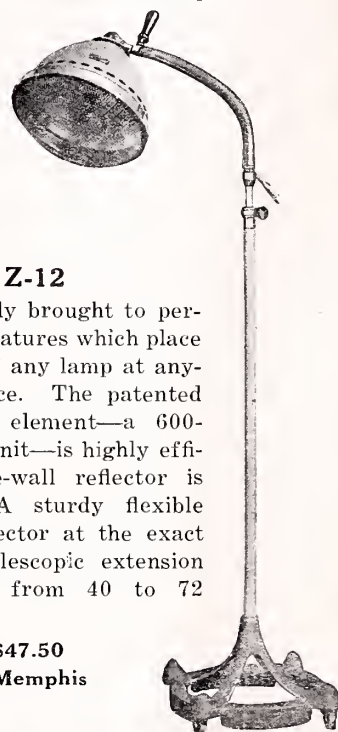
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THE MISSISSIPPI DOCTOR

OFFICIAL ORGAN OF THE NORTHEAST
MISSISSIPPI THIRTEEN COUNTIES
MEDICAL SOCIETY

Booneville, Miss., 114 Main St.

W. H. ANDERSON, M. D., Editor and Manager

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The most youthful hospital in our society is the one at Starkville, operated by Dr. Long. It seems to be making a fine success. The people are being served and are delighted. Aberdeen is soon to have one of the most modern and up-to-date open community hospitals in the South from the best of our information. We congratulate the people and the medical profession in these towns and counties.

In this issue of the journal we have unusually good papers. The essayists are Drs. Rudner and Sanders, of Memphis, and Dr. Staton, of Columbus. Dr. Rudner's paper was read before our last meeting at Starkville. We appreciate his presence and his paper. Dr. Carl Sanders, of Memphis, has a most timely and instructive paper, for which we thank him. Dr. Staton comes along with his maiden essay before our society and it is a good one.

The members of this Association should turn out by a big majority to the Tri-States meeting on Feb. 6, 7, and 8. It is a post-graduate course all in three days. You may get the last word on the entire field of medicine and surgery epitomized by a leading authority. We should feel a pride in this meeting because one of our own members, Dr. V. B. Philpot, is president. Mississippi has another mighty good man as vice-president, Dr. A. G. Payne, of Greenville.

You will note the initial ad of the Surgical Selling Company of Atlanta. We give them a cordial welcome into our family of advertisers. We trust that the benefits derived will be mutual. Everything else being equal, let us buy from the ones who advertise with us. They deserve the first consideration.

The outstanding question before the medical profession is to render medical service at less cost to the people and at the same time make more money for themselves. It can be done. The open community hospital is the answer to the question. The patient must be brought to the doctor. It is cheaper for him to travel ten miles and lose a day's time than for the doctor to do it. While the doctor is driving ten miles he can see a half dozen patients, often times diagnose and prescribe for them.

One of our members, Dr. W. F. Saul, of Montpelier, Miss., was killed last March near West Point. The car in which he was riding, but not driving, went over an embankment and he was killed instantly. In some way the Committee on Resolutions did not get their report to The Mississippi Doctor. We had been unable until recently to learn much about Dr. Saul, not being personally acquainted with him. But recently we have been informed of some of his fine qualities. He was born in 1882 in the same community in which he practiced. He graduated from the Hospital Medical College of

Memphis in 1913. He returned home where he practiced until his untimely death, and where his father, Dr. W. V. Saul, is still in the practice. He had a large general practice and to which he was very much devoted. We are informed that he had a strong hold on the people for which he labored. That he was most unselfish, liberal and kind; that he never failed to respond to the call of the sick and to those in distress regardless of whether they could pay or not. We know that the people have missed the power of his personality and his devoted services. The Mississippi Doctor extends its sympathy and regrets to the father, the family and friends in the loss of a relative and a useful citizen.

On the front cover of the journal you will note the likeness of Dr. Bolivar Smith, Booneville, Mississippi, Route seven. He lives at the little village of Burton, fourteen miles from the railroad. We don't know his exact age, just how young he is. It is pretty safe to say that he has spent a half century in the "service." Anyone who knows him will never think of him in terms of age. He is mounted on "Dolly" ready for a trip. "Dolly" has been his faithful standby for fifteen years. She is always ready. It takes no lash for her and Dr. Bolivar says that if she has ever been tired she did not let him know it. Her graceful and easy foxtrot makes eight or nine miles an hour with safety and certainty. She knows and understands. When she was saddled at the barn for this photograph, she walked straightway to the veranda of the office, the floor of which is about three feet high, and stood with a watchful eye. She is not only the standby in visiting the sick, but she delights, or seems to, just as much as Doctor Smith in the fox chase.

Dr. Bolivar Smith is an able and a safe practitioner. He is more. He has a personality set apart and unique. He drinks deep of the pleasures, the joys and sympathies of his country folk who all but worship him. He is first in their hearts of distress, and last to forsake them in time of need. He is lenient in his charges and his collections and liberal in his giving to every good cause. He does not have a telephone in his home, but the paths are well beaten from every direction—one for infantry, one for cavalry, and the hard surfaced road for automobile. His living room is set apart, as it were, from the rest of the house so that no one will be disturbed. It is filled with windows and plenty of doors, the fireplace takes the big logs and there is a big center table and chairs, a number worn and sleek with use. On this table you will find more daily papers and weeklies than on any other, perhaps, in North Mississippi. The neighbors come to get physic and be physicked from the big office hard by the house, and they come to sit in the armed chairs and to drink of his fountain of knowledge and wisdom in medical science and political economy, and to learn

of the present, and the past and the future of human affairs, local, state and national. And on the bad nights to live over one of the big fox chases.

Dr. Smith always takes a deep interest in politics. He has plenty of ability to make a governor. He always takes sides. But he is so fair, and so honest that his bitterest political enemy would trust him to count all the votes by himself any time.

It is doubtful if any other man in Prentiss County has as many admirers as does Dr. Bolivar Smith. His years of patient and efficient service have entrenched him secure in the hearts of his people. His personality will never cease to flow across the human ocean of time.

FINANCIAL STATEMENT THE MISSISSIPPI DOCTOR

Collections from Dec. 12, 1927, to Dec. 14, 1928, \$628.50; amount on deposit Dec. 12, 1927, \$179.23; total cash for the year, \$807.73. For publication of journal, \$660.00; for stamps and postage, \$15.00; Total, \$675.00 Bil's unpaid, none. Cash on deposit Dec. 14, 1928, \$132.73.

W. H. ANDERSON,

Editor and Manager.

HERPES ZOSTER OPHTHALMICUS ASSOCIATED WITH ACUTE PAROTITIS

By

D. E. STATON, M. D.

Columbus, Miss.

This paper is presented principally as a case report, but with some few observations of my own. It was of interest to me because of the complication associated with the herpes and the eye condition.

Herpes Zoster of this region is a unilateral affection and ordinarily does not cause any serious trouble unless the eye structures become involved, in which case you may have a serious condition to combat. This case happened to be of some severity and occasioned alarm for a short time. Due to the fact that I hadn't seen the two diseases associated before, this paper is presented.

We know that constitutional symptoms are at times seen with herpes and usually this form of herpes is seen in elderly people, whereas my case was in a man of about thirty years.

Our text books and literature in general tell us that Herpes Zoster Ophthalmicus is due to an irritation of some part of the trigeminal nerve trunk or of the Gasserian ganglion, which assumption is borne out by the distribution of the lesion following the nerve branches so closely, especially the nasal and frontal branches; the naso-ciliary branch being involved in virtually all cases of Herpes Zoster of the eye.

This patient became ill one day and sent for me on the second day following. When I saw him the chief complaint was soreness in the right side of his neck and parotid region just in front of and below the ear of that side, together with a sharp pain, neuralgic in character,

over the right side or forehead and temple, this pain being much worse at night. The herpes or vesicles were not causing him much concern though they were scattered profusely over the right side of forehead, cheek and nose, none of them, however, extending beyond the midline, which is typical of this form of herpes. The vesicles were arranged more or less in groups of two or more and measured probably six or seven millimeters in diameter, the skin between patches being reddened and edematous looking and pitted slightly on pressure.

Over the parotid region the tissue was swollen and showed a distinct elevation over the surrounding structure. On making pressure here considerable tenderness was complained of, the tenderness being rather a constant complaint. The conjunctiva of the right eye was red and chemosed; the lids, both upper and lower, showed swelling and were dark purplish in color, the eye being kept constantly closed. On separating the lids a thin mucous exuded. In addition to the conjunctival injection there was distinct ciliary injection, the vessels circling the corona in a typical manner. On the cornea was seen a small vesicle about one millimeter in size in the region of four o'clock which subsequently broke down forming an ulcer.

On the second day the patient was seen there was a slight swelling and tender area in the left parotid region which did not later increase in size or tenderness to any appreciable extent. There was no sign of fluctuation or pointing at any time on either side.

On the third day the patient was seen the ulcer, or rather the vesicle, on the cornea broke down to form the ulcer, which did not perforate though he did have a rather severe irido-cyclitis.

The temperature was not over one hundred Fahrenheit at any time. Blood Wasserman was negative as was also the urine. Other physical examination was negative. No smear or culture from the eye was made as it was judged to be unnecessary as we felt that the eye was not infected but simply involved from the nerve irritation and corneal involvement alone; especially did we believe this to be so as there was no perforated ulcer or anything to lead us to believe otherwise.

Vision in this eye was 20-200 and in the other eye 20-20.

On the day the patient was first seen some swelling of the iris was noted together with a slight muddy or discolored appearance, this becoming more pronounced with each passing day. On making pressure in the ciliary region tenderness and pain was complained of. A few small deposits could be seen on Descemet's membrane which later became dense enough to partly obscure a view of the iris in its lower portion.

The ciliary injection became more pronounced as did the conjunctival injection and reached its maximum on or about the eighth day.

The parotid swelling had receded by the fourth day and was not noticed after that time.

In the way of treatment moist dressings of saturated magnesium sulphate solution were used over the parotids, which were sufficient. For the skin vesicles a dusting powder of zinc oxide combined with acetanilid was used, three times a day or oftener if seemed justified: under this treatment they healed in due course.

The patient was kept in bed in a dark room to avoid excess light; the dark room was considered sufficient to prevent light irritation and thereby prevent pupillary accommodation and secure rest for the iris and ciliary body.

Magnesium sulphate in one-half ounce doses was given each morning for three days, after which time we substituted cascara at nights. Hot wet boric compresses were begun at once on first seeing the patient, for the irido-cyclitis, as was also the atropine in one per cent strength to prevent synechia formation. Atropine was instilled every two hours for four instillations but did not dilate the pupil sufficiently, so cocaine in four per cent solution was used every two hours just previous to the atropine, for four more times. This still did not have sufficient cycloplegic effect to dilate the pupil so adrenalin solution was alternated with the atropine and cocaine which, after three applications the desired result was attained. After mydriasis was fully secured atropine was used only twice daily for the remainder of the time as that sufficed to keep up the dilation.

No bandage was applied to the eye in the beginning because of the use of moist dressings and later it was not used because of the more profuse character of the discharge or secretion.

The ulcer was cauterized once daily with tincture of iodine for several days until it showed signs of having a stationary margin and no indications of advancing farther. The eye was cleansed daily with warm boric solution. Diaphoresis was obtained by the use of Dovers powder and aspirin with hot drinks, as it was not practical to use other methods with the patient in question. Sweating was thought desirable as we hoped in this way to favor reduction of inflammation as well as promote absorption of exudates.

With the above mentioned treatment we did finally, after several weeks' treatment, reduce the inflammation and secure a fairly good eye. No visual field was taken except in a general way though we knew his central vision was good, which was 20-30 four weeks after his discharge.

In spite of the difficulty of getting a desirable dilation of the pupil at the start, there were very few iris tags from posterior synechia. The sluggish mydriatic effect was evidently due to the severe inflammation rather than the attachment of the iris posteriorly.

We were somewhat at a loss as to how to account for the parotitis unless it was simply coincidence that it showed up this time. The patient stated that he had had mumps when a child.

There were three children in the family, none of whom had ever had anything resembling mumps and none of whom developed it from this patient. In addition to these three children in the family there were several from the neighborhood who visited there almost daily in spite of our warnings to stay away, and as far as we were able to find out none of them acquired the disease from our patient.

These facts are presented in the nature of a question and while of course we felt that in all probability the parotitis was simply a "happen so" at that time, we still were in doubt.

MUCOUS COLITIS

By

HENRY G. RUDNER, M. D.

Mr. Chairman and Gentlemen:

In selecting the subject of my talk on the most common gastro-intestinal diseases, I selected that of Mucous Colitis. It has, in my opinion, taken active lead in the most prominent chronic gastro-intestinal disorders, one that causes both patient, doctor and friends a great deal of concern; and one whose symptomatology is legion. To be sure, it will tax the science, ability and brain of he who has to treat this condition as much as it does the one who has it. Certainly this condition is increasing by leaps and bounds, almost as rapidly as the symptom of hyperthyroidism. As one of my good friends expressed it, "There must be an association of this condition with gasoline and aeroplanes," meaning that most of us are constantly up in the air, beating our colons with reflex stimuli and purgatives as a modern necessity and enemas as a modern time saver.

I am taking up this subject at this meeting with the desire to express a few of my personal beliefs as to the cause of this condition, and the expression of the beliefs of others, and again, my method of handling this condition.

The synonyms of this condition are various and confusing; such terms as "chronic intestinal catarrh, chronic colitis, myxorrhoea coli, myxorrhosis intestinalis, muco-membranous colitis, intestinal neurosis," and various other muco-colitides. Mucous colitis conveys the wrong conception, and I do believe that it is the wrong term to use. A true case of mucous colitis, or colica mucosa, is not an inflammatory process, proven by the fact that autopsies done on these patients that had this condition and died from other causes, had no evidence of inflammation of the large bowel.

Colonic Vagotonia, a term used by Dunham, I believe, covers the part involved as well as the etiology. If you please, I would suggest that it is similar to an attack of asthma, or asthma of the bowel. Again, it has a very close resemblance to hay fever; burning of the eyes, sneezing and rhinorrhoea; also it is similar to chronic anaphylaxis and migraine. We find this condition in a highly selected type of individual, the most highly sensitized type, with high emotionalism, artistic temperament. to be sure, neurotic to some degree. Certainly, hay fever, anaphylaxis, migraine and asthma in the great majority of cases occurs in the highly sensitized individual, and very seldom is one of these conditions found in the illiterate, or hard working type of laborers, most uncommon in the negro.

It gave me great pleasure to hear Dr. Dunham express himself on this condition, when he says that the first description of this disease had a very ancient origin: it is to be found in the second Chronicles, Chap. 21, verses 12-19 inclusive, as follows: "And there came a writing to him, Jehorah, from Elijah, the prophet, saying, 'Thus sayeth the Lord God of David, thy father, because thou hast not walked in the ways of Jehosaphat, thy father, nor in the ways of Asa, King of Judah, thou shalt have great sickness by the way of disease of thy bowels until thy bowels fall out by reason of the sickness day by day. And after all this, the Lord smote

him in his bowels with an incurable disease'." This was probably a cause of mucous colitis. The powerful suggestion made by Elijah doubtless caused him to scrutinize his stools, and then arose a diarrhoea with mucous casts. The emotional state of the ancient king must have been distressing, causing his vagotonia, and perhaps sitaphobia, and starvation. Probably, if the prophecy were reversed, the emotional state of Jehoram might have released the hypertonicity of his Vagus.

ETIOLOGY

The opinions of various and all the masters disagree up to the present date. McCarion's studies suggest a deficiency in the vitamin "C" with an excess in starches and fats which produce pathological changes. He also thinks that it is a constitutional disorder brought about by dietary disorders and excesses plus an association with other infections.

Goldman thinks, that it is brought about by abnormal endocrine functions, also by focal infections of teeth, tonsils, appendix, disease of the gall bladder, ptomaine and chemical poisons, mechanical obstructions, plus faulty metabolism.

Both Thayer and Cabot contend that it is a neurosis, although Thayer thinks that the nervous element is an associated condition and not the cause of the mucous colitis.

Da Costa calls it a dyscrasia of the vegetative nervous system, stating that it is doubtful that we can consider the affection as originally an inflammation at all, that the true trouble is in the nervous system and in the nerves presiding over the secretion and nutrition in the abdominal viscera.

It has been a very common experience in my work to note the very close association of colonic vagotonia and ureteral spasm; also the fact that sufferers of colonic vagotonia keep the otolaryngologists busy; they suffer with vaso motor rhinitis, and in the female with non-organic pelvic disorders, and in the males, early impotency. We have also found in members of the same family allergy, colonic vagotonia, or addicts to purgatives others have migraine, asthma, or eczemas. You will also get a history in childhood of various gastro-intestinal disorders, spasmophilia, food allergy, eczemas and drug idiosyncracies. Most of my patients have been frequent visitors to the operating table. We have in our clinic routine stool examinations and cultures repeated, procto-signoidoscopic examinations and complete allergy tests on practically every case of this type; and I have to find a true case of colonic vagotonia that showed positive reactions who was relieved by a withdrawal of the food, protein or whatnot; neither have permanent cures followed treatment of various infestations been observed. But I do believe that we are still pioneers in allergy work, and that we will in all probability have light on the subject, and most certainly, it will help to separate true food allergy from a neurosis of the colon. Surely the patients have various food allergies; only a small percentage of them can tolerate sweet milk in any form without producing an attack of colic or diarrhoea. And again, it has been my experience that just this type of patient will not give positive dermal tests to milk or its ingredients; the same is true of egg. Most of these patients are positive to cheese, and yet they tolerate it

very well.

Metabolic tests do not show an appreciable increase in the Basal Rate, even though they all lose weight, and have an accelerated pulse rate, there is no increase in Basal Rate. Tuberculosis plays no part in this condition; and, in my opinion, infection and infestation in the alimentary tract have no part, only, that severe infections of the alimentary tract may leave the tract in such a state and the constitution of the patient undergo such a change, that they may eventually become sufferers of vagotonia. This is open to question. The intestinal hypersecretion and diarrhoea associated with hyperthyroidism is not the condition that we are now discussing. Patients with colonic vagotonia do not have the symptomatology of those with vitamin "C" deficiency.

This statement is rather broad and may cause comment by surgeons. The condition, vagotonia of the bowel, is not caused by abdominal pathology; as, ptosis of the colon, low cecum, adhesions do not cause the condition, and surely surgery does not remedy it—only that it aggravates the condition colonic vagotonia. Practically all of my patients have the diagnostic abdominal scars, from north, south, east and west. If there were any relief from operation on the abdomen, the relief was only temporary, and the condition reappears in a more severe form. I do not mean that the operations were all done for the relief of the colonic vagotonia or mucous colitis; possibly the condition was not, at the time, paramount, or there were definite evidences otherwise for surgical assault to the abdomen, as acute appendix or acute gall bladder.

The colon is not in a state of constant activity, it has no true peristalsis, as the stomach and small intestines; its whole motor activity is confined to a small number of powerful waves each day, which travels down its length; this is called "mass peristalsis," and only occurs as the result of the gastro-colic reflex, and is excited by the taking of food into the stomach. At this time the pylorus closes, and the ileo-cecal valve opens, allowing the contents to enter the larger bowel; hence the bolus of material is massed and moves down into the colon simultaneously with the recto-sigmoid closing. This reflex is exaggerated in certain individuals to such an extent that in addition to the passage of the solid stool, on getting up in the morning, that they have loose stools after breakfast and the subsequent meals. The accumulation of hard feces in the colon of the individual with an irritable nervous system causes a reflex spasm of the intestinal muscles and the secretion of mucus. This mucous remains with contact with the mucous membranes before it passes on, and it has time to be coagulated and form thin membranes which are passed with the stools or separately. This is the condition of irritable colon or spastic constipation. As a rule, so long as the patient does not know that he is passing mucous, he is practically well; but as soon as he finds this out and begins to scrutinize his stools, various treatments are instituted, purgatives from above, chemicals from below—and then the horrors and the sins of the colon begin. The next scene is various doctors, various X-ray studies and stool examinations, and over a definite period of time the patient becomes a connoisseur of stools.

Under normal conditions the mucous membrane of

the colon is kept moist by the secretion of mucous, which renders the passage of feces onward with more ease. Like all other mucous membranes, it reacts to both chemical and mechanical irritation by an excess secretion of mucous to protect its delicate epithelial lining from injury. By the time the massed stool is in the colon terminal and sigmoid, there is no further physiological absorption, it is a true reservoir, and the absorption only occurs where the contents of the colon are in liquid state; this is an abnormal condition. This accounts for the clinical fact that the patients feel much better when constipated than they do in the days following the use of purgatives, the absorption of toxins from the colon when the stool is liquid, accounts for the commonly used and misunderstood term, "biliousness." We know that when there is a retention of feces in the rectum, known as dyschezia, there is no accumulation of mucous. The microscopical examination of this mucous shows the presence of desquamated epithelial cells, no pus cells or other signs of inflammation; and proctoscopic or sigmoidoscopic examination reveals a normal mucosa, with the passage of normal material coming down.

SYMPTOMS

The condition "Colonic Vagotonia" is characterized by attacks of abdominal pain associated with the discharge of mucous casts in the stools; one paroxysm is always followed by another in a few days, weeks or months; or the condition may be constant, or with quiescent periods. The average attack lasts about a week, and there are various grades of severity. The onset may be acute, or subacute and chronic. There is pain, burning in the abdomen, distension, nausea, vomiting preceded by constipation, then the discharge of mucous; these symptoms practically always precede the discharge of mucous about ten days—with some relief. After this, the abdominal soreness wears off, the patient feels fairly well, though exhausted, tongue is coated and thick, there is fetor oris, the patient becomes sluggish, palpitation and sweating and marked fatigue. There is an associated frequency; he becomes dyspeptic with a sense of unease in the abdomen, he becomes apprehensive about his condition, loss of appetite and the fear to eat appears, he has insomnia; he thinks that he has become poisoned by some type of food or that he has some incurable malady as cancer. They develop a true psycho-neurosis, and a constant fear of another attack. Then follows a loss of weight, they become markedly vaso-motor, sweating palms, sweating and chilly sensations, the circulation becomes feeble, complexion sallow and a condition of apathy develops. The abdominal aorta becomes dynamic and causes a great deal of concern. Between the attacks the bowels become irregular, alternating constipation and loose stools, tenesmus is often complained of. At this stage, the patient will complain of sore mouth, boils, carbuncles, papular eruptions, acquires a very unhealthy complexion due to purgation, cathartics and again shows signs of a disordered nervous system. The bladder quite presents symptoms, polyuria, oliguria, at times, with retention of urine, mucous in the urine.

After a few seizures, the patient may recover, but is never up to one hundred per cent.

I have seen attacks of such severity that Levine

tubes had to be passed into the stomach over a period of one to twenty days, hypodermoclysis of glucose had to be given and very drastic cardiac stimulants had to be given. In the height of the attack, the white blood count ranges from 20-30,000; but you will note that there is a relative lymphocytosis instead of a neutrophilic leukocytosis that one would see with an acute abdomen, also an eosinophilia of 5-10%. The blood chlorides are diminished as low as 200 mg. per 100 cc blood. The blood count of afebrile leukocytosis or of concentration has coined a new term, "gut leukocytosis." If there has been considerable reaction plus purgation or vomiting, there may be a febrile reaction of 100-103 degrees with a rapid pulse rate. It is this condition that misleads a surgeon to a diagnosis of acute gall bladder or perforation, and with these symptoms and blood findings, we can see how, at times, it would be very easy to be misled.

DIAGNOSIS

The diagnosis of an acute abdomen should be guardedly made with patients with a history of mucous colitis who are definitely psycho-astrenic or neurotic. One with a history of mucous in the stools and whose stools do not show any pus or red blood cells is to be studied, or who tells you of a previous similar attack, or a laparotomy without relief of symptoms. The patient with an acute seizure who does not present to the surgeon the faies of an acute abdomen, although there is a fixation of the abdomen, the left colon is practically always palpable and definitely tender, and has the tone of spasticity. There is a general tenderness over the entire course of the colon; a gentle continuous pressure over the colon relieves the pain rather than aggravates it as it would in an acute abdomen. The increased blood count, relative lymphocytosis, eosinophilia, history of food idiosyncracies, hay fever, asthma, migraine, constipation and purgatives are the diagnostic symbols. X-ray of the gastro-intestinal tract shows definite spasm of the colon, or irritable colon. Proctoscopic or sigmoidoscopic shows a fairly healthy colon with strings of mucous in the colon and high spasm. If the cases are of long duration, the colon will have a bluish spotted hue, evidences of atrophic changes.

TREATMENT

The acute attack must be treated by sedatives, atropine or bella donna, hot fomentations to the abdomen; if vomiting persists, passage of the Levine tube, the patient to lie on the right side to thoroughly drain the contents of the stomach which are due to reversed peristalsis. The dilation of the stomach or duodenum may occur, necessitating the use of pituitrin. Hypodermoclysis of glucose, or, if the blood chlorides drop, the use of saline by clysis or intravenously. Cardiazol-Metrazol-Camphor as stimulants, opium, or luminal sodium by hypo. The use of the drip in my experience seems to be poor treatment as it irritates the colon and causes reflexes. As soon as the acute seizure has subsided, nourishment may be taken by mouth or through the Levine tube, preferably milk, if tolerated, peptonized, weak tea, fruit juices, orange and pineapple, thin purees of oatmeal, cream of wheat, beef broth, adding lactodextrin or milk sugar to the fluids. The patient must have absolute quiet and must have full confidence in the physician. Most of them tolerate belladonna, in

Mxx-x, t.i.d. It has been my experience that only seldom do we find a case of colonic vagotonia that is intolerant to belladonna. At this period there will be accumulations of large amounts of mucous in the stools, and either obstipation or diarrhoea. The fluid intake must be increased in either case. If diarrhoea supervenes, use bismuth and paregoric. Very often hypochlohydria exists, necessitating the use of hydrochloric acid. If the patient is a habitual user of purgatives, he will plead for the use of some type of purgative, and it may be necessary to give him an eliminant, far better, mineral oil with cascara, or agarol with phenolphthalein. In the obstipated cases, the injection of six ounces of warm olive oil or Wesson oil with Tr. belladonna Mxxx rectally, very serviceable; this should be given every night for a week, and then every other night for two weeks and finally, twice a week. The fatigue, weakness plus a low grade anemia is better handled by the use of cacodylate of soda or some iron preparation intravenously. Treatment by light, massage, packs to the abdomen, ultra-violet or diathermy to the abdomen is very helpful. A thorough anamnesis, history of food tolerance in the dietary as soon as a patient is ready for his diet, it should be bland at onset, and not a diet for constipation. This should consist of milk, cream, broths, well cooked cereals, pureed vegetables, beef bouillon, concentrated soups with all the vegetable vitamins, ovaltine, malted milk, custards, gelatines, fruit juices, pureed prunes, soft eggs, milk toast. But if the patient is of the type subject to diarrhoea, care must be taken in the giving of fruit juices and vegetables. This type of patient tolerates proteins very well, he will have to learn when the stools are loose, not to use the laxative foods. In the atonic type of marked constipation, powdered agar is added to the cereals, fruit mixtures of dates, prunes, raisins are given adding agar to this, increasing the vegetable allotment, especially those that are bulky. It must be carefully seen that the patient gets a well balanced diet in order to avoid developing a vitamin deficiency. If he is unable to tolerate vegetables, then the various types of concentrated vegetables must be used, as Vegacs, Vitavose, and the tomato preparations. If he has a milk intolerance the tolerance should be increased by injecting small amounts of milk daily. I wish to mention irrigations of the colon only to condemn them, since it has been my experience that it only tends to irritate the colon, and it is almost an impossibility to pass a colonic tube over six or eight inches without irritating the colon or having the tube curl on itself. Cleansing enemata may be used to get rid of irritating boluses of mucous. There is no necessity of the use of astringents in this type of colonic affection. The dyes have no use in this condition. It is common practice to give these patients bromides in association with their belladonna. As improvement manifests itself, the dosage may be slowly lessened.

A careful analysis of the patient's mental condition and the opportunity for psychic must be investigated. This cannot usually be accomplished at one sitting, but after a time when the confidence of the patient has been won. After the mental condition has been grasped, then suggestion may be used to change the patient's attitude toward life. Re-education with an attempt at withdrawing his attention from his bodily functions

must be attempted. If there are definite foci of infection, of course they should be removed. If there is apparent endocrine dysfunction, as hypothyroidism, hypoovarianism, or premature menopause, this should be treated. The patient must be made to understand that he has no serious organic disease, that the condition is only functional, and that his cure must be helped by his own efforts. I wish to emphasize that I have only seen this condition in psychoneurasthenics, and even though it may be only a functional condition, we have seen most grave symptomatology. Worries, emotional infelicities, unsatisfactory sexual relations, all have a tendency to produce the condition. As Judge Lindsay suggests, companionate marriages would do a great deal to reduce the colonic vagotonias in young women.

SUMMARY

Mucous colitis is not a disease entity; it is not an inflammatory condition of the colon; that it has a neurogenic background; that it occurs in highly sensitized individuals; that it is definitely associated with migraine, hay fever, asthma and allergy; that it is a functional condition, but at times producing grave symptomatology; that this condition, in general, cannot be treated by drugs, colonic irrigations, various and sundry treatments, the only drug of absolute specificity is belladonna and it is a condition which calls forth the physician as a psychoanalyst and a psychotherapist as well.

A DISCUSSION OF SOME OF THE MORE COMMON DISEASES OF THE LOWER BOWEL

By

L. CARL SANDERS, M. D.,
The Polyclinic,
Memphis, Tenn.

Diseases of the anus and rectum are the most neglected of all the pathologic conditions affecting the human organism. Just why this is true is difficult to explain. Both women and men have an inherent reluctance in volunteering information concerning abnormal conditions about the anus. They frequently use the various advertised nostrums to treat themselves, rather than seek medical advice. The medical profession has not considered seriously enough its responsibility in caring for the diseases of the lower bowel. Medical instructors casually mention ano-rectal diseases and medical journals are conspicuously short of articles bearing on this subject. Physicians often neglect to question their patients concerning symptoms which would lead to a proctoscopic examination. The busy physician will frequently prescribe an ointment or suppositories without making a rectal examination. Needless to say, the results of such treatment are far from satisfactory.

The lower bowel is as accessible for examination as the nose and throat. Preliminary preparation by a simple enema is usually satisfactory. If a proctoscopic table is not available, the patient can be examined in the knee-shoulder position on an ordinary table. The instruments necessary are: a medium size sigmoidoscope and anoscope with direct light, finger cots, microscopic slides, and cotton swabs on long applicators. Where a water faucet

is available, a long tube suction outfit can be used with advantage.

Indications for proctoscopy are: Pain in or about the rectum or anus, bleeding from the anus, protrusions, pruritus, abnormal discharge, crawling sensation in the anus, and unexplained diarrhea or constipation. If every patient is questioned concerning these symptoms, it is surprising how many will acknowledge one or more being present. Examination of the anus should be made with the patient lying on the side with the knees flexed. In this position the sphincters are relaxed and very little pain is experienced. If the patient is allowed to strain as at stool, abnormal conditions such as fissures, and enlarged papillae, are brought into view. In the same manner also, intestinal hemorrhoids or polypi, are forced to protrude and can be seen. The examining finger should be inserted and by a rotary motion the anus and lower rectum carefully palpated. After this examination the patient can be placed in the knee-shoulder position and proctoscopy performed.

Constipation is frequently the result of pathology in the lower bowel. Any condition which results in abnormal sphincteric contraction at the anus will eventually produce constipation or fecal impaction. Errors in habit, diet and sedentary living are productive of stasis in the colon. Hard, dry fecal masses accumulating in the rectum produce an atony of the bowel wall and irritate the structures comprising the anus. Small fecaliths entering the crypts of Morgagni cause a chronic inflammation and subsequent abscess formation. Anal papillae become hypertrophied by irritation and the elongated papillae produce a contraction of the sphincters of the rectum. Engorgement of the hemorrhoidal plexus frequently results in hemorrhoids. When the anal mucosa is irritated and injured by hard feces fissures are formed. The acrid discharge from infections involving the papillae, crypts and fissures, pours over the skin around the anus causing a pruritus. Therefore patients with any of the above diseases may seek medical advice because of pruritus ani.

Diarrhea, unless profuse or frequent, is often ignored by the patient and physician. Intermittent loose stools may be due to errors in diet, achylia, chronic cholecystitis, protozoan infection, chronic colitis, proctitis, cryptitis or polyposis. Amebiasis is not uncommonly found in patients who have no diarrhea. Frequent watery stools accompanied by tenesmus is the most common cause of hemorrhoids. Stool examination should be made of every patient complaining of diarrhea.

Pruritus ani is fairly common and is a complication of some disease higher up in the bowel. Ointments and powders applied naturally give only temporary relief unless the cause is found and relieved. Every patient complaining of pruritus ani should have a careful examination of the anus and rectum.

Papillitis is hypertrophy of the anal papillae due to chronic irritation. These papillae may become enormously enlarged and protrude through the anus giving rise to a crawling sensation which is sometimes mistaken for worms.

Cryptitis usually accompanies papillitis. The crypts of Morgagni secrete the mucus which lubricates the feces in its passage through the anus. When they become infected, they expel an acrid fluid which is largely responsible for pruritus. When the infection in the crypts bur-

row through the mucosa, local abscesses form which may penetrate the perineal and perirectal spaces, producing large, deep-seated abscesses and consequent fistulae. Cryptitis is a focus of infection which is frequently overlooked. There is an abundant blood supply to the anus and absorption of pus from this source can produce focal symptoms as easily as infected tonsils or septic teeth. One of our patients, a girl 22 years of age, had complained of progressive weakness, loss of weight and a daily rise of fever for four years. Frequent general examinations had been made by various physicians with negative findings. Her lungs were normal, her urine contained no pus and her tonsils had been removed without relief. On careful questioning, she remembered on a few occasions to have noticed an itching and burning in the anus and a few times her underclothing were stained yellow. On anoscopic examination a large infected fissure and abscess of the post-anal crypts were found. There is no doubt of this being the focus which had previously been overlooked.

Fissure in ano with its sentinel pile, is a familiar picture to all. Text books tell us that ninety per cent are found in the posterior anal commissure. We have found almost as many anteriorly. Superficial fissures in the anal skin are often multiple. Deep fissures into the mucosa are usually single. Pain in the rectum during and after defecation is the outstanding symptom. If the fissure is deep enough to expose a nerve filament or sphincter muscle, the pain may be severe enough to require an opiate. Fresh bleeding after defecation always occurs when the fissure involves the anal mucosa. Patients with long-standing fissures become anemic and the general health is impaired. Pruritus ani develops when the fissure becomes infected. The purulent discharge excoriates the skin around the anus producing a constant irritation which is impossible to control without correcting the fissure.

Peri-rectal abscesses are common. Infection from the crypts and fissures burrow through the mucosa above Hilton's white line and entering the peri-rectal spaces, find a fertile field for abscess formation. The symptoms of a peri-rectal abscess are, pain in or around the rectum, extreme sensitiveness, fever, rigors and leucocytosis. Unless the abscess is drained early, it will penetrate the soft structures along the line of least resistance, pointing into the rectum, vagina or into the buttock on either side of the anal opening. If such an abscess is opened early much destruction of tissue is prevented. Fistulae usually results from these abscesses. Correction of fissures, cryptitis and constipation will greatly reduce the number of perirectal abscesses.

Fistula in ano is an infected tract through the soft structures of the buttocks or perineum, resulting from an incomplete healing of an old abscess. If the infection has burrowed in several directions the openings will be multiple. A blind fistula has only one opening. A complete fistula drains into a viscus and externally in the buttocks or perineum. Fistulous openings are quite characteristic. There is an eversion of the subcutaneous tissue, forming a teat-like elevation with an opening in the center from which a purulent material can be squeezed. Blind fistulae pointing into the rectum are often difficult to locate. One can often palpate the indurated area around the opening by the examining finger. A direct view through the anoscope reveals the sinus and makes the diagnosis certain. The vast majority of fistulae are

not tuberculous though fistulous tracts are frequent in patients with pulmonary tuberculosis.

Hemorrhoids, both internal and external, are the result of mechanical pressure upon the irritation of the hemorrhoidal plexus. The mechanical pressure by the pregnant uterus and the straining during childbirth frequently result in large internal hemorrhoids. Constipation, fecal impaction, and diarrhea from disease or purgation causes a chronic congestion of the veins of the lower rectum and subsequent varicosity. Internal hemorrhoids are covered with mucus membrane and originate above the internal sphincter. They may protrude en masse forming the well known grape-like cluster and become very painful. This variety frequently bleeds profusely and if untreated will cause a partial prolapse of the rectum. When contraction of the internal sphincter cuts off the return circulation, strangulation occurs. This condition is very painful and demands emergency treatment. External hemorrhoids are covered by skin, having their origin below Hilton's white line. A large external hemorrhoid may become thrombosed causing acute pain and swelling.

In making the examination for hemorrhoids, the patient should be placed on his side with the knees flexed on the abdomen. The buttocks are separated and he is asked to strain as at stool. The hemorrhoids will present at the anal opening. The gloved index finger well lubricated is gently inserted and careful palpation with a circular movement made to determine the extent of the hemorrhoids. Later, the patient can be examined through the anoscope in the knee-shoulder position.

Polypus. Polypi may be found singly or in large groups and will be found complicating other rectal diseases. The usual location of a single tumor is in the lower rectum about two inches from the anus. It sometimes grows on a long pedicle and may protrude outside the anal opening. Multiple polypi may fill the entire colon and cause few symptoms. The usual symptoms are: abnormal protrusion, bleeding, diarrhea, and partial obstruction. Polypi are usually benign though they may undergo malignant degeneration. They are more often found in young people.

Strictures of the rectum are the result of previous inflammation. All of the cases have their origin in some previous intra-rectal injury, or irritation due to dysentery, carcinoma, syphilis, tuberculosis or muscular spasm. The symptoms are those of obstruction due to the narrowing of the anal canal. The stools will be soft, small, thin and contain mucus and sometimes blood. Gaseous distension from incomplete evacuation, vague pains in the pelvis or back and general malaise from autointoxication. Syphilitic strictures are far more common in women than in men.

Malignancy. Cancer occurs in the rectum more commonly than in any other part of the colon. The favorite sites are the lower dilated portion or ampulla and the recto-sigmoid. Ulceration occurs early. The onset is insidious with no loss of weight or cachexia in the beginning but rapid loss in the late stage. There is often a sensation of weight and pressure in the rectum accompanied by alternate diarrhoea and constipation. The stools are blood stained when ulceration has occurred. Where the cancer is located in the ampulla, it can be palpated by the examining finger. In the recto-sigmoid it can be seen through the proctoscope. Malignancy of the rectum

is more common in men than in women. A characteristic feature about it is the fact that it often occurs in individuals under thirty years of age. Metastasis occurs by way of the lymphatics and veins. The diagnosis is made by the symptoms, the examining finger when in the ampulla, the proctoscope when higher up in the rectum and by the deformity seen in an opaque enema. Patients in the cancer age who complain of sudden onset of constipation or alternate constipation and diarrhea, who have symptoms of partial obstruction and blood stained stools, should be carefully examined for rectal carcinoma. In the end stage when loss of weight and cachexia appear, the condition is usually hopeless because of metastasis having already occurred.

MANAGEMENT OF THE DISEASES OF THE ANUS AND RECTUM

Treatment may be divided into three classes:

1. Prophylactic.
2. Medical.
3. Surgical combined with medical.

Prophylactic treatment consists of hygienic measures, cleanliness, correction of constipation, diarrhea, the proper mastication of food, the drinking of an abundance of water, and the avoidance of using unclean nozzles to enema syringes.

Medical management is beneficial in simple inflammatory conditions such as cryptitis, apillities, superficial fissure and mild hemorrhoids. We have seen some excellent results from the application of 5% mercurochrome (220 soluble) on cotton swabs, followed by the instillation of two ounces of extract of witch hazel into the rectum. Treatments are given every day at first, then every

other day. As the condition improves, treatments are given twice weekly until the lesion has healed. The instillation of four ounces of olive oil at night or suppositories containing a mild antiseptic such as boric acid, zinc oxide and ichthyol is often a helpful adjunct to the local treatments.

Surgical treatment is necessary in all cases of deep-seated cryptitis, elongated papillae, deep fissures, prolapsing, strangulated, thrombosed or bleeding hemorrhoids, polypi, abscesses, fistulae and malignancies.

It is our custom to follow up all our surgical cases with medical treatment until the wounds have healed. Convalescence is shortened, the wounds heal more kindly, the patient is more comfortable and the end results are far more satisfactory when this procedure is followed. Beginning on the fourth day, when the bowels have moved, we take the patient to the treatment room daily for treatment similar to that outlined under medical management. The wounds are cleansed and the dressing changed after each bowel movement and in the case of post-operative fistulae, the iodoform gauze packs are changed daily. This requires a great deal of work but the results more than justify the effort expended.

In conclusion I wish to emphasize the importance of a careful examination of the lower bowel, in all patients who present symptoms pointing to disease in this region. Treatment should continue until healing has occurred. In disease of long standing many weeks may be required to restore the bowel to normal function. Patients as a rule co-operate well and are grateful for the relief obtained.

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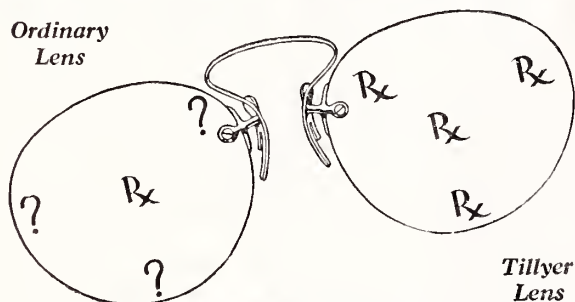
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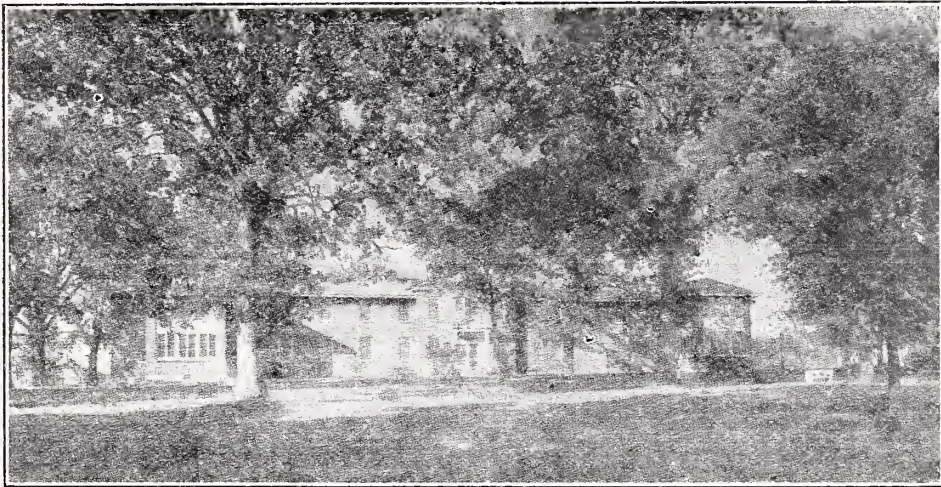
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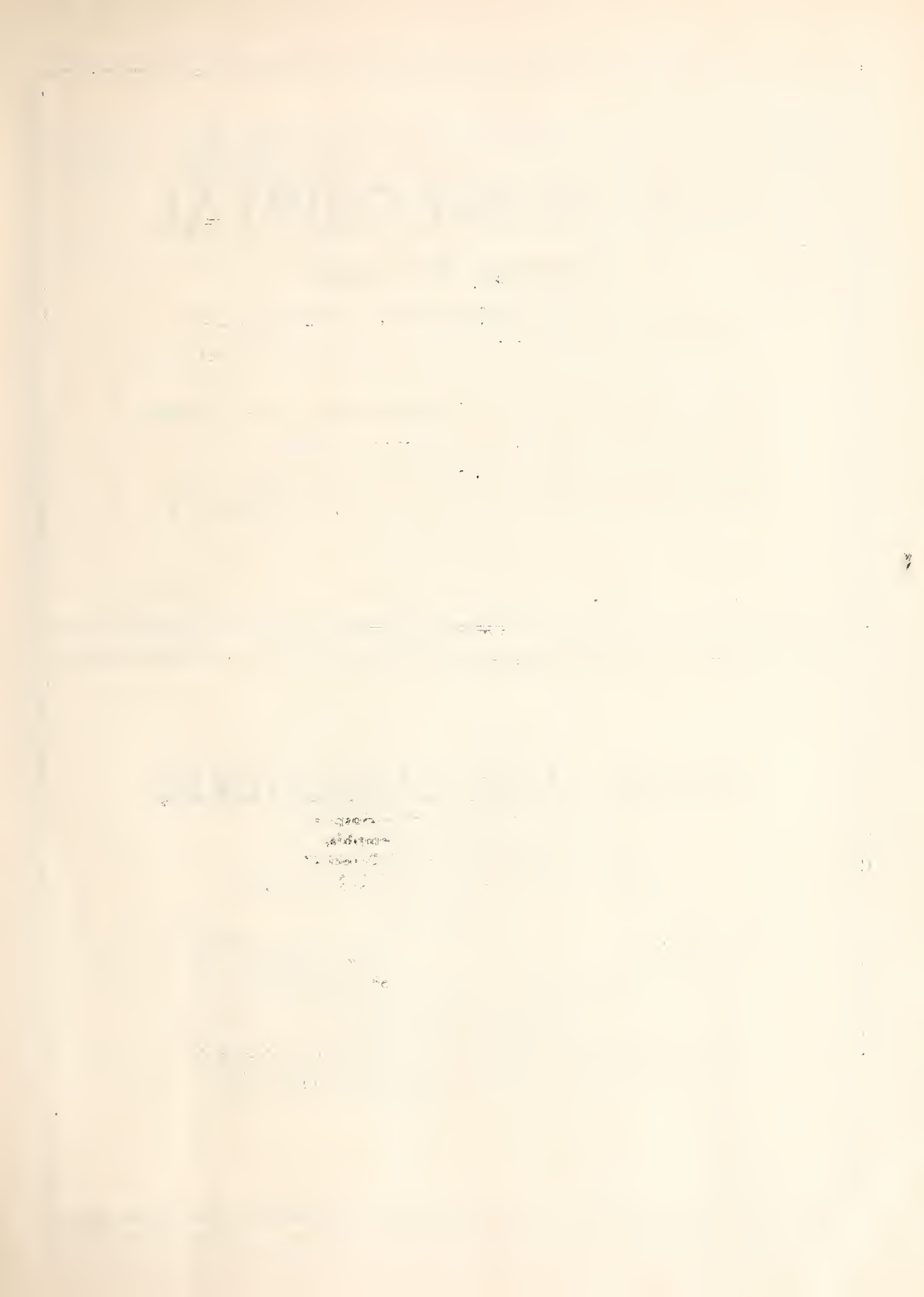
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THE MISSISSIPPI DOCTOR

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BOONEVILLE, MISSISSIPPI, MARCH, 1929

NUMBER 9

LET ME WALK WITH THE MAN IN THE ROAD

THE N.Y. ACADEMY
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(THE DOCTOR'S POEM—Editor)

'Tis only a half truth the poet has sung
Of the "house by the side of the way";
Our Master had neither a house nor a home,
But He walked with the crowd day by day.

And I think, when I read of the poet's desire,
That a house by the road would be good;
But service is found in the tenderest form
When we walk with the crowd in the road.

So I say, let me walk with the men in the road,
Let me seek out the burdens that crush;
Let me speak a kind word of good cheer to the weak
Who are falling behind in the rush.

There are wounds to be healed, there are breaks we
must mend,
There's a cup of cold water to give;
And the man in the road by the side of his friend
Is the man who has learned to live.

Then tell me no more of the house by the road,
There is only one place I can live—
It's there with the men who are toiling along,
Who are needing the cheer I can give.

It is pleasant to live in the house by the way
And be a friend, as the poet has said;
But the Master is bidding us, "Bear ye their load,
For your rest waiteth yonder ahead."

I could not remain in the house by the road
And watch as the toilers go on;
Their faces beclouded with pain and with sin,
So burdened, their strength nearly gone.

I'll go to their side, I'll speak in good cheer,
I'll help them carry their load;
And I'll smile at the man in the house by the way,
As I walk with the crowd in the road.

Out there in the road that goes by the house,
Where the poet is singing his song;
I'll walk and I'll work midst the heat of the day,
And I'll help falling brothers along—

Too busy to live in the house by the way,
Too happy for such an abode;
And my heart sings its praise to the Master of all,
Who is helping me serve in the road.

—Walter J. Gresham.

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PROGRAM

1. Invocation Rev. F. Bryant
2. Reading and Adoption of Minutes last Meeting
3. Mediastinal Abscess Following Injuries to
Neck E. Q. Withers, Columbus
Discussion Opened by Drs. Pegram and Staton.
4. Pyosalpinx Complicating Labor.....
..... F. C. Spalding, West Point
Discussion Opened by Drs. Naugle and Suther-
land.
5. Earache in Children.....
..... Eugene Rosamond, Memphis
Discussion Opened by Drs. Dickson and Wicks.
6. Some of Our Professional and Associa-
tional Needs..... W. H. Frizell
President Mississippi State Medical Association
Discussion General.
7. Report of Some Unusual Cases.....
..... R. D. Kirk, Jr., Tupelo
Discussion General.
8. Business Session.



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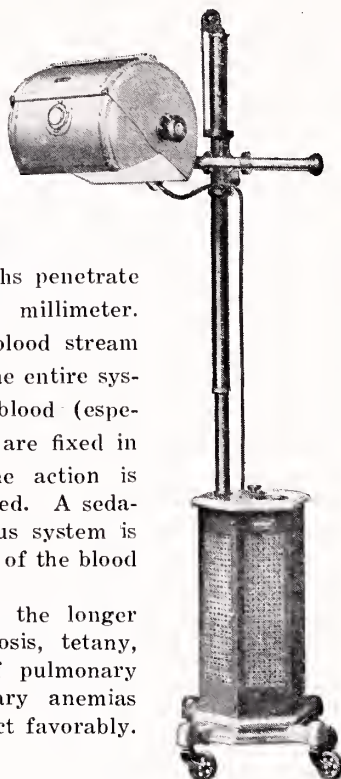
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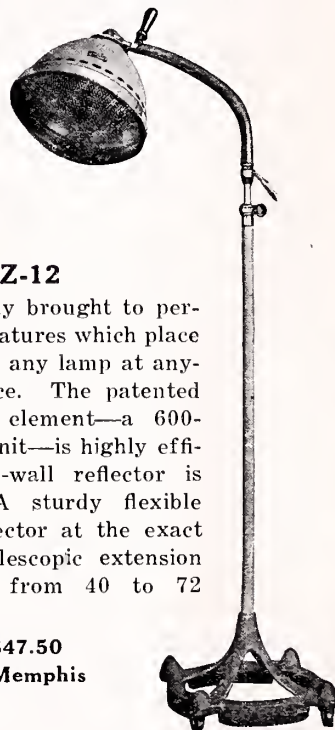


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MISSISSIPPI MEDICAL SOCIETY

Booneville, Miss., 114 Main St.

W. H. ANDERSON, M. D., Editor and Manager

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Let us rush down to Okolona. It is a fine place for a meeting. The doctors are mighty clever. And we have a good program scheduled, also.

We have some splendid papers in this issue of the journal by friends who are not members of the association. You will find them all of special interest. We thank the essayists for these splendid papers.

We are publishing Dr. Philpot's address in this issue of the journal. He makes a strong plea for the Community Hospital. His address was well received. Our association feels a pride in furnishing the presidency of the TriHStates. This association is outstanding and it is attracting national attention.

We extend our congratulations to our genial friend, Dr. Boyd of Aberdeen. Last week he was cited by the War Department for gallantry in action during the World War. This came because he "held his head" under fire. This is the time to test the real stuff of which a man is made. Put him under stress and strain, put him under fire, put him to the test of what may be the last minute and then you may know the inner man. Our fellow physician was put to the test and the manly elements of the inner man were not found wanting.

Dr. Smith's picture and the poem, "The Coun-

try Doctor," made quite a hit with our readers. We have had letters saying that the picture has been framed and placed in the office. We have had calls for more journals than we had. It may be that we will have to repeat this cover at an early date. We want to make the front of the journal a feature as it has been. We want to have a picture of interest after this issue each time. A medical character that is unique, or some building. We want to call your attention to the poem of this issue. It is a Doctor's poem. Keep it and commit it to memory.

One of the most outstanding personalities that appeared on the program of the Tri-States at its recent meeting, was Dr. Arthur C. Christie, of Washington, D. C., Professor of Roentgenology in George Washington University, and editor of The American Journal of Roentgenology and Radium Therapy. He reported and discussed some cases of exophthalmic goiter that were treated with x-ray. He did not offer a conclusion, but the indications look mighty good from this report. It is perfectly reasonable that the end may be accomplished with radiation as well as with operation. The aim is to decrease the output of the thyroid gland. Radium or x-ray may accomplish this quite as well in the uncomplicated case as operation. We have had splendid results in two or three cases with the use of radium. Members of the Tri-States will be pleased to have Dr. Christie on the program again next year.

The following officers were elected for the Tri-States Medical Association for the year 1929: President, Dr. P. W. Lutterloh, Jonesboro, Ark.; Vice-Presidents, Drs. R. M. Donald, Morehead, Miss., L. H. McDaniel, Tyrozona, Ark., E. W. Hillsman, Trezevant, Tenn.; Secretary-Treasurer, Dr. A. F. Cooper, Memphis, Tenn. Dr. A. F. Cooper has been thoroughly tried out and found worthy and the best qualified secretary in the United States. Dr. Lutterloh is an able man, worthy, and well balanced. He, with his vice-presidents and the program committee, will no doubt keep the association up to the high standard that it has now attained and will go forward.

Book Review: A supplemental volume of the Gynecological and Obstetrical Monographs has just been published by D. Appleton and Company bringing this work up to date in every respect. This volume not only brings everything up to date, but it gives an index that is most convenient to the entire works. One of the most helpful set of books that has been offered to the practitioner is the Gynecological and Obstetrical Monographs. It is the composite ideas of the very best men in the country on each subject and on different phases of each subject. The ones who have this set of books will no doubt be pleased to know that the cumulative supplement may be obtained at the very reasonable cost of five dollars from D. Appleton and Company, New York.

PRESIDENT'S ADDRESS

TRI-STATES MEDICAL ASSOCIATION
MEMPHIS, TENNESSEE,
FEBRUARY 7, 1929

V. B. PHILPOT, M. D., F. A. C. A.
Houston, Mississippi

Mr. Toastmaster, Fellow Members of the Tri-States Medical Association, Ladies and Gentlemen:

I wish to express my profound appreciation for the high honor this association has given me. The Tri-States Medical Association is one, with the possible exception of my home district and state society, that seems closer to me than all other associations of which I am a member. This is perhaps due to the fact that Memphis is the home of my Alma Mater, and four of the happiest years of my life were spent here, during which time the first medical association it was my privilege to attend was this.

The only sad feature that comes to my mind at this time is the absence of pioneers of this society, some of whom, in all probability, have assisted in conferring medical degrees on more than half of the members present on this occasion. These men are absent, but surely they are accounted for in the progress and growth of this association. Though they are dead, yet shall they live. May we pause for a moment to recall

the merits of those of our members who have joined the "innumerable caravan" and pay tribute to their memory.

As President of this association, I congratulate the Secretary and members of the Program Committee for the excellent program they have prepared. I feel confident that there has never been a stronger array of distinguished and learned men of our profession on a program of any medical association lasting only three days. It has taken a great deal of time, patience and correspondence to make this possible, and I repeat that these men deserve a great deal of commendation. This committee will have some recommendations to make. After a thorough investigation, I am of the opinion that they will be to the best interest of this society. I recommend that the association adopt them.

I thank the Memphis Chamber of Commerce and the newspapers of this city, as well as many papers from the three states, for the publicity given this meeting. It has been a characteristic of Memphis to do the big thing, and those of us from the three states are proud to call the city of Memphis "our" city.

I also take this occasion, in behalf of this association, to extend a welcome to and express deep appreciation of the distinguished visitors who have come here from other states to assist us in making this program possible. We welcome you to the heart of the now "semi-solid" South. The profession of the three states and all the citizenry of this territory extend to you cordial greetings. We hope your time here will be pleasant and that you will carry back to your native states sweet remembrances of your association with us.

In looking about for a subject for an address of this kind, I have noticed that the history and progress of medicine is frequently the chief subject for consideration on such an occasion; but there is hardly a man in this organization, or present here this evening, who doesn't know more history of medicine and more of the progress of medicine than your presiding officer. I should like, however, to say a few words in regard to a certain service. For, after all, service to humanity is the object of our being here; in fact, the sole object of our being physicians at all.

I shall confine my remarks to one special service, which, to my mind, is one of the greatest services at the present time that the profession has promoted and will render to the public in the future. This is the service of bringing modern medicine to the people in the smaller towns and communities throughout our commonwealth. Throughout Arkansas, Tennessee and Mississippi at this time, small hospitals have sprung up in innumerable central points and are gradually becoming recognized as small medical centers. This is as it should be. The railroads are as a network throughout the country. Hard-surfaced roads are being constructed through every community, a large per cent of our farm homes have telephone connection with the outside world. High-powered electric lines are reaching even the small villages. Why shouldn't modern medicine and modern medical conveniences be brought to all the people? In doing this, it does not take away, by any means, the patronage of the larger cities and the large institutions, for it is a notable fact that, in spite of the many small

hospitals and infirmaries that have sprung up throughout the three states, mentioned above, the hospital capacity in, for instance, the city of Memphis, has probably doubled or trebled during the last eight or ten years, and yet I am told the hospitals are crowded practically all the time. This, obviously, is due largely to the people's becoming educated to hospital conveniences made possible through closer contact with them.

One of the chief services the community hospital renders is to aid the family physician in the territory in which it is located. And, so, the first and most important problem in bringing modern conveniences to all the people is close co-operation among the doctors themselves. In my opinion it takes the co-operation of nearly one hundred doctors with good territories to keep one of these small institutions going with the best of equipment. There should be a small group of specialists, doing no outside work, connected with them. You cannot hope for a man in general practice to send a surgical patient to a competitor. It has been observation that the family physician does not care to do surgery, or the other specialties, if a full-time specialist is accessible to him. Then, certainly it does not behoove us, who pretend to specialize, to dabble in general practice. There is a saying that the family physician is passing. I contend that this is a mistake. He is not passing; but a new era is developing for him. By being brought in closer contact with more modern conveniences, he is better able to do that which he already knows how to do.

The American College of Surgeons has recommended a plan which is being adopted by a great many standardized hospitals, and which I wish to strongly emphasize, whereby the hospital shall have an examining room made available to all doctors in its territory. The family physician can bring his patient to this room, examine his own patient, and have the benefit of laboratory and x-ray facilities, operated by experts, and such other scientific aid as the hospital affords at a minimum expense to his patient. The examination is directly under his supervision. The specialists are called only when he thinks it is necessary. With such conveniences, and, knowing the patient's family history and the patient's past life and idiosyncrasies as he does, accuracy in diagnosis will be in keeping with that of most others. Such a procedure will have a tendency to create annual health examinations among the laity, which will have the effect of their becoming acquainted with such defects as they are liable to have and getting them adjusted; thereby, prolonging life. Furthermore, should the patient need to go to a specialist, the community hospital enables him to have his family physician with him during such operations as may be necessary and to see him occasionally afterwards. This is a great consolation to the patient and, frequently, a suggestion from the family physician is of great benefit to the surgeon or specialist in charge and can be well taken. In other words, the community hospital renders it possible for the specialist and family physician to work together, keep their patients closer to home, eliminate enormous expense, and, in many cases, save life by saving patients long-distance trips.

I must repeat, however, that it is absolutely necessary that we co-operate with each other to do this. We have nothing to gain in being any other way. The best

people, whether rich, middle class, or poor, appreciate this co-operation. To have and to hold this, there is no better way than to follow the Golden Rule and to always speak well of our co-workers in the medical world, for, in the language of William Hamilton Hayne:

"The noblest words, if falsely said or sung,
Are but the smooth Delilahs of the tongue;
With softness, deadlier than a brutal blow,
Truth is the Sampson that they overthrow!"

The next great problem that confronts the community hospital at this time is that of charity. The poor will be with us always, and it takes the soul out of any hospital to turn them away; yet taking patients without funds will mean that such an institution will cease to exist. We thought in our own State of Mississippi that we had solved this problem to some extent. For eight or nine years small amounts for charity to about twenty-five small hospitals were being appropriated by our State government and, while the entire number received less than one of the five state-owned institutions, as far as I know, no bona fide charity patient was turned away from any of these community hospitals. Furthermore, these people were being kept near their homes, relatives and friends, and, as already stated, saved the expense and danger of going away. This method, not by any means perfect, had become so popular in legislative circles that the vote for nine consecutive sessions was practically unanimous. Recently, however, on account of different opinions among our state officials as to the proper manner of handling this fund, the poor in the rural communities were left to get hospital service as best they could. So, this problem is not as yet solved; but, just as certain as other worthwhile problems have been solved, THIS ONE WILL BE.

The small town or rural hospital should be standardized by all means. People everywhere are seeking the best these days and, with the exception of the soul of man, there is nothing more precious than human lives. It is a natural instinct in us all to want to live; it is, therefore, the great desire of those in every community, seeking relief from disease, requiring hospital care, to get the best possible service in a modernly-equipped institution and from the hands of a well organized, well trained, conscientious personnel.

A great per cent of the patients going to the small hospitals at this time are surgical in nature, and those of us doing surgery in them must realize our responsibility. We must recognize the importance of careful history taking, thorough physical examinations, the necessity of laboratory and x-ray assistance, and welcome consultation and advice from any good source. We should operate only on those we have good reason to believe we can relieve or cure, and refrain from removing normal organs on the strength of a single symptom. Should there come to us patients with such conditions that a better chance of relieving or curing them might be obtained in the larger centers, we must so advise them, and insist on their going. In fact, no better surgical creed has ever been given than that of Guy de Chauliac of Montpellier, 566 years ago, in admonishing those who would follow surgery as a profession, when

he says: "Let the surgeon be well educated, skillful, ready and courteous. Let him be bold in those things that are safe; fearful in those that are dangerous; avoiding all evil methods and practices. Let him be tender with the sick, honorable to men of his profession, wise in his predictions; chaste, sober, pitiful, merciful; not covetous nor extortionate; but rather let him take his wages in moderation, according to his work, and the wealth of his patient, and the issue of the disease, and his own worth."

Ladies and gentlemen, the life of a conscientious doctor, regardless of his specialty, is not an easy one. The family physician, who gets closer to the heart and lives of people than any other person, looking after their physical needs from birth until death, lives a life of stress and strain, toilsome, anxious and responsible. I say his efforts deserve more credit than that of any other person. The surgeon, who does not worry, according to Dacosta, does not care a whole lot. "Perhaps," as he says, "worry is a disease of a nature to make us try to do our best." It is fortunate for us in this day of modern surgery that approximately ninety-five per cent of our patients do well, or reasonably well; but who of us have not seen the existence of some precious person, on whom we have operated, hanging nearer death than life, when we wonder if there had been anything done that we should not have done, or left undone that we should have done. In such cases how many times we would have been willing to give all our possessions and mortgage the future to be able to restore the life of one entrusted to our care.

And so, I repeat, the doctor's life is not an easy one; but is one that we love and one we would not exchange for any other. In the language of Whitman Barbe, in his "Ashes of Incense," we can say:

"I ask not,—

When shall the day be done, and rest come on?

I pray not

That soon from me the "curse of toil" be gone;

I seek not

A sluggard's couch with drowsy curtain drawn.

But give me

Time to fight the battle out as best I may;

And give me

Strength and place to labor still at evening's gray;

Then let me

Sleep as one who toiled afield through all the day."

PRACTICAL MEASURES TO BE USED IN THE CONTROL OF DIPHTHERIA

By

T. W. KEMMERER, M. S., M. D.,
Director of Laboratory
Mississippi State Board of Health.

Of course the really scientific way of controlling diphtheria is to immunize all children in the first or second year of life. Then, there would be no diphtheria problem.

But this ideal is not attained at the present time. There is an outbreak of diphtheria. What is to be done about it? Culture the whole school for carriers? If this is done, what will be accomplished? Undoubtedly a number of carriers will be found. If these are excluded from school, what will be the result? The epidemic will continue just the same unless it has reached that stage when it will die out anyway.

What is accomplished by this survey for carriers? As stated above, a part of the carriers will be found. But not all of them. If cultures are taken again, others will be found. If cultures are taken the third time, still others will be found. If cultures are taken again and again, some carriers will be found which were not previously found.

The point is, one survey will not pick up all the carriers because the diphtheria bacilli are not always on the mucous surfaces; because the swab is not properly taken (and this is not a reflection on any one because as you all know, it is not always possible to get a good swab, especially in a school where you cannot be too rough with the children); or the culture may be overgrown by other organisms; or for some other reason.

Now since it is absolutely certain that all the carriers will not be found, possibly only a small percentage of them on one survey, what will be accomplished by excluding from school those that are found? Again, it is definitely known that a large percentage of these carriers harbor non-virulent or only slightly virulent diphtheria bacilli which do not produce clinical diphtheria. Suppose these carriers of non-virulent diphtheria bacilli are excluded, but one of the carriers of virulent diphtheria bacilli is not picked up, what has been accomplished? Certainly no good. Possibly harm, for this reason. It is known that during the first six months of life there is a high degree of immunity to diphtheria. This is explained on the supposition that antitoxin in the mother's blood is transferred to the foetus. This immunity decreases after the sixth month and is generally lost during the first or second year of life. Later a relative immunity develops, differing in degree in different individuals, and increasing with age. What produces this immunity? Presumably, repeated infections with non-virulent or slightly virulent diphtheria bacilli.

It is possible to suppose that if all carriers of non-virulent or slightly virulent diphtheria bacilli could be found and removed from a school or community, in time none of the individuals would have any immunity at all, and, if exposed to infection by a virulent strain of diphtheria bacilli, would contract the disease and there would be a high mortality except in so far as the disease was controlled by antitoxin. Consequently, the carriers of non-virulent or slightly virulent diphtheria bacilli may be decidedly beneficial to the community.

It might be argued that a virulent test can be made. But this takes carriers, as also does the culture, and promptness of action is necessary.

But above all, since the survey cannot detect anywhere near all the carriers, it is of little if any value.

Well, if the survey for carriers is useless, what is to be done. 1. Early diagnosis and isolation of the case. 2. Isolation of the immediate contacts (in the family) until all danger of infection is past and it is

proven that they are not carriers of virulent diphtheria bacilli. 3. Isolation of the convalescent until it is certain that he is not a carrier of virulent diphtheria bacilli.

4. Early and adequate use of antitoxin. 5. Education.

1. **Early diagnosis.** It is known that outbreaks of diphtheria are more apt to occur at certain seasons of the year and under certain circumstances. For instance, in the fall when the children first enter school, outbreaks are apt to occur. It would be perfectly justifiable to insist that, at least during this period, the teacher send home every child showing the slightest sign of illness and that the child remain at home until it is certain that no infection is present.

2. **Isolation of contacts.** Since it is practically impossible to completely isolate the other children in the same house where there is a case of diphtheria, whenever possible they should be sent away to another house. If this is done, they should be isolated until danger of development of the disease from previous exposure is past and then at least two, better, three, consecutive negative throat and nose cultures should be required before they are allowed to return to school. If they remain in the same house as the patient, quarantine should be as long as for the patient; two, better, three, consecutive negative cultures being required before release.

3. **Isolation of the convalescent.** As you all know if the cultures are taken early during convalescence, a negative culture may be followed by a positive culture or two negatives may be followed by a positive, or negative and positives may alternate for a long time. This often causes considerable embarrassment to the physician, as he can not explain it in a way satisfactory to the family. They may even accuse him of making a lot of extra trips to run up the bill, provided he is getting paid for his visits. It would be well to have established by law (regulations) a minimum quarantine period of say two, better, three weeks, after all signs of infection have disappeared and at the end of this period require two, better, three, consecutive negative cultures for release. The family is always in a hurry to be released from quarantine. If there was a minimum period of quarantine, long enough so that the majority of convalescents would be free from infection, it would save the physician a great deal of trouble.

Moreover, far too often the convalescent is released from quarantine and allowed to return to school and indulge in violent exercise long before he should for his own good. There are two things to consider in the treatment of diphtheria; A, the manifestations of the infection and, B, the intoxication produced. If the administration of antitoxin is delayed or if the dose is insufficient toxin may be absorbed to produce serious injury to the nervous system, the heart or other organs.

This brings up two questions:

a. What is to be done when the diagnosis of diphtheria is doubtful and, b. How much antitoxin should be given?

If it is a frank case of diphtheria, of course antitoxin should be given immediately. No delay as a matter of convenience even for an hour or two is excusable. If there is a reasonable supposition that it is a case of diphtheria, antitoxin should be given at once and a definite diagnosis made later.

The physician following this plan will at times be chagrined to find that he has given the antitoxin unnecessarily. But the physician who waits to have the diagnosis confirmed by the laboratory, or as if often done, the diagnosis made by the laboratory, will find that now and then irreparable damage has been done while he has been waiting for a report.

It might be argued that a direct smear can be made and can be examined in a very short time. If a direct smear is sufficiently characteristic to make a diagnosis, well and good; but if it is not and the case is clinically fairly characteristic of diphtheria, the physician is not justified in waiting for a culture before giving antitoxin. It might be asked, then what is the use of the direct smear? Well, if it is positive, it will ease the physician's mind to have his judgment corroborated when he has a case sufficiently characteristic of diphtheria to demand the administration of antitoxin immediately although the clinical diagnosis is not absolute.

Again, a culture must be grown five hours at least before it can be examined. A negative culture does not preclude the presence of diphtheria. As stated above, diphtheria bacilli may be present in the throat and yet not be present in the culture from the swab. It is possible to take a swab from the surface of a diphtheriatic membrane and get a negative culture. The swab should be taken from the inflamed mucous membrane immediately around the diphtheria exudate. It may be added that diphtheria bacilli may be present in the throat and yet not be the cause of pathological condition.

Some one may throw up his hands and say, "Well, if the laboratory cannot make an absolutely positive or negative diagnosis for us, what is the laboratory for?" This: 1. Every physician needs all the help he can get in making a diagnosis but he must not expect the laboratory to do it all for him. 2. There are cases of low grade infection, diphtheretic, in which the clinical picture is not at all characteristic. In these cases, the laboratory can be of help in clearing up the diagnosis. 3. The physician needs to check on himself to know whether he has made an error or not. If he does this, he will make fewer errors and be a better diagnostician.

In regard to the dose of antitoxin. It is probably true that 100 units of antitoxin would neutralize all the toxin in a case of diphtheria provided it could be brought in contact with the toxin. But this cannot be done, therefore, it is necessary to give a large excess. The consensus of opinion is that it is advisable to give 10,000 units in the average case and 20,000 units in severe cases. Large doses should always be given in nasal and laryngeal diphtheria. Diphtheria is deceptive and the intoxication is often much more severe than the appearance of the patient would indicate. Rarely will doses larger than 20,000 units be required. Possibly of more importance than the size of the dose is the time and manner in which it is given.

Antitoxin given subcutaneously requires about twelve hours before any decided effect is produced. During this time a large amount of toxin may be absorbed and produce damage to the nervous system and heart. Therefore, it is advisable to give antitoxin intravenously in cases at all severe. In the past this was considered a rather formidable procedure. But at the present time,

practically all physicians are introducing needles into veins to withdraw blood for the Wassermann test and are giving Neo-asphenamine intravenously so that they are acquainted with the technique. The danger of anaphylaxis in giving any serum has been stressed so much that there is a hesitancy in giving antitoxin, especially intravenously. Park says that diphtheria toxin prevents anaphylactic shock in sensitized guinea-pigs and states positively that "There is no instance on record of diphtheria antitoxin causing fatal anaphylactic shock in a person ill with diphtheria." "It is, therefore, inexcusable to delay or hesitate to use full therapeutic doses of antitoxin in diphtheria." Therefore, precaution is necessary only in those cases where the diagnosis is in doubt.

5. Education. It is possible by persistent effort to impress upon the child the danger of such things as coughing and sneezing in each others' faces, using common drinking cups, putting pencils in their mouths, etc.—not forgetting to set a good example.

In a certain school in another state, the children were taught to "bow to the floor" when they coughed or sneezed, etc. Later a supposed authority on tuberculosis read a paper in that community and as he read, he wet his thumb with his tongue to turn the pages. The children got to snickering and his paper fell flat.

As intimated in the very beginning of the paper, the ultimate goal in the control of diphtheria is the immunization early in life, as soon as possible after six months, and certainly before the end of the second year. The greatest mortality from diphtheria is in the early years. If immunization is delayed until the child enters school and an outbreak occurs, the immunization cannot be accomplished soon enough to be of any value in that outbreak because it requires about six weeks to establish the immunity. Of course the outbreak should be used to impress upon the community the importance of immunization and to get the work started. But the bulk of the work should be done before the third year of life, preferably by the family physician. The family physician should be led to see that it is his duty, as well as good business, to insist that this work is done, and cultures have been obtained.

WHOLE BLOOD TRANSFUSION

By
E. H. GALLOWAY

This paper is read at the request of your Secretary and is in substance the same as read before the last meeting of the State Medical Association. However, a much larger series of cases have received transfusion at my hands since that time and I have been better able to judge of the results obtained.

For many years blood transfusion has been practiced, frequently with disastrous results. Forty years ago Gulland of Edinburgh practiced transfusion of blood, very frequently with violent reactions, and sometimes the death of the patient. Only in the past twenty years can it be said that blood transfusion has been at all generally used, or in other words, since the accurate typing and matching of blood.

Indications:

There are four positive indications for the use of

blood transfusion:

(1) Acute hemorrhage with consequent anaemia and associated shock.

(2) Chronic anaemias, to carry a patient safely over an operation, or in the hope of benefit as in pernicious anaemia.

(3) Hemorrhagic diseases.

(4) General toxemia, bacterial or chemical, including extensive burns.

Essential precautions:

(1) Examination of the donor for syphilis.

(2) Examination of the donor for malaria.

(3) Accurate typing and matching of both the donor's and recipient's blood.

Methods:

The methods may be classified as modified and unmodified, the latter by the direct or indirect methods.

In the modified method the blood after withdrawal is mixed with an anti-coagulant and given to the patient either immediately or within the period of thirty minutes to an hour. Sodium citrate is the anticoagulant of choice, although sodium iodide, sodium sulphate and several other agents are employed.

In the unmodified methods we have to consider the direct transfer of the blood. Crile of Cleveland devised the method by means of special canula, of anastomosing the donor's artery and the recipient's veins. Likewise, Bernheim used a special tube for the same purpose and Horsley has directly sutured the vessels. Those of you that may have tried Crile's method know that failure is as often the result as success, and furthermore know that you have no accurate means of knowing how much blood is being utilized.

Indirect method:

(1) All of you have had experience with the paraffine coated tubes of Percy and Kimpton-Brown and no description either of the apparatus or your results, to say nothing of your mental attitude at the time, is necessary.

(2) Direct syringe method, using several syringes, and several trained assistants in transferring the blood. In my hands this has been an extremely unsatisfactory method.

(3) Unger method, which consists of this apparatus with a two-way valve swivel, arranged so that while the blood is being drawn from the donor normal saline is flowing through the needle to the recipient, and when the valve is reversed and the patient is receiving the blood the stream of normal saline is flowing through the needle to the donor. In this way your needles are never closed by clotting. This method has further been modified so that both surgeon and assistant are transferring blood, shortening the time of transfusion by one-half. Clotting will frequently occur, however.

The Scannell outfit works on the same principle as the Unger, with the exception that saline solution is only used when necessary to clear the needles or tubes. This gives an opportunity for a clot to form which cannot be removed and your transfusion results in a failure.

Of the methods, the citrated has the advantage of ease of administration, no especial skill being needed. Also it has the advantage of being able to transport the blood some distance when necessary. Its disadvantages,

however, are somewhat numerous and far outweigh its advantages. The first is danger of contamination, the blood being exposed to the air. Again, the blood cells are damaged by stirring or agitation. Sodium citrate destroys the blood platelets which are necessary to maintain the blood at its highest efficiency, thus diminishing its powers in the control of bleeding and the combatting of infection. Herr, in *Surgery Gynecology and Obstetrics*, Oct., 1925, goes thoroughly into the subject, showing many objections to the use of any anticoagulant in giving a blood transfusion.

However, the principle objection to the use of citrated blood is the rather large number of violent reactions that follow its use. Scannell, in reporting on a large series of transfusions reports reactions of a violent nature in 18 per cent of cases with citrated blood, only two per cent with whole blood. Patients requiring a blood transfusion can ill afford to suffer the depressing effect of a hard chill followed by high fever.

Quoting Herr again, the ideal method of blood transfusion should meet the following requirements:

- (1) Whole blood should be used.
- (2) The blood should not come in contact with the air.
- (3) Few assistants should be necessary.
- (4) The transfusion should be performed with speed.
- (5) A blood vessel should not be opened except in extreme cases.
- (6) There should be a means of accurately measuring the blood.
- (7) It should be possible to perform the operation at the bedside.

All of these requirements are fully met by the Unger method of transfusion. The time required to transfuse one pint of whole blood should consume from six to eight minutes. My experience with this method is limited to one hundred and four cases with two reactions, one severe, one mild. Over against this is a series of cases equally as large with a much greater percentage of reactions.

Permit me to report one or two outstanding cases in which blood transfusion was used with success.

A young man, white male, age fourteen, shot through left knee with shot gun, lower end of femur torn away and popliteal vessels severed. Tourniquet was wrapped around thigh just above the wound when he entered the hospital two hours after accident, pulseless, cold and clammy. Donor, previously typed, quickly secured, typed and matched with patient, and in fifty minutes after patient entered hospital, 500 c.c. of whole blood was given. Six and a half hours later 600 c.c. given and twelve hours later 700 c.c. given. Eight hours later the patient underwent an amputation of the thigh, leaving the operating table with a pulse of 100 and of very good volume. The hospital with which I am connected keep from 80 to 100 donors typed all the time ready for urgent cases, which probably was the means of saving this young man's life.

One of the chief indications for blood transfusion is in active gastric and duodenal bleeding, not only to replenish the lost blood but to increase the coagulability of the blood and stop further hemorrhage. I confidently believe that the bleeding can be controlled in practically

100 per cent of these patients, the hemorrhage stopping promptly after the first transfusion. Miss B. P., age 28, while cooking dinner, suddenly vomited a large quantity of blood. At 4 P. M. she had another large hemorrhage from the stomach, and again the following morning. Reaching hospital at 11 A. M., very pale, pulse thready, 160. 700 c.c. whole blood given at 12:30 P. M. Aside from vomiting a very small amount of blood already in the stomach, her bleeding ceased immediately. Two other transfusions of 600 c.c. each were given on alternate days and ten days after the last transfusion her condition justified a gastro-enterostomy, from which she made an uneventful recovery.

Mr. S. came to the hospital with a large carbuncle on the back of his neck, which was excised with cautery and he was allowed to return home after five days to be cared for by his local physician. Three days later he returned, having had a hard chill with a temperature of 105. Culture showed staphylococcus in the blood stream. He was given mercurochrome twice in the next two days, but continued having chills for the three days following, two and three in the twenty-four hours, with temperature 104 to 106. He was given seven whole blood transfusions of 500 c.c. each, one every second day. After the second he ceased to have chills and after the last he was running a normal temperature. Blood stream negative on culture after the fourth transfusion, positive after mercurochrome.

A number of transfusions have been given in pernicious anaemia which has served to tide these patients over the cycle. Nothing more can be claimed for transfusion in this class of case, but with whole blood and liver diet, I feel that something may be accomplished.

Unfortunately blood transfusions are only resorted to in the very desperate cases whereas, if used preceding operations on patients who are below par physically, who are anaemic, and in poor condition for a major operation. I am sure that our mortality will be considerably reduced. In just this class of case I am more and more availing myself of this very helpful agency.

Ravdin of Philadelphia has done some wonderful work in exsanguination transfusion in severe burns and has reported some brilliant results. Of this I have had no personal experience.

Conclusions:

Blood transfusions by any method are of value in properly selected cases.

Whole blood should always be the method of choice. Its greatest value is in severe hemorrhage and shock.

It is the most reliable prophylactic at our command in preventing post-operative shock in bad surgical risks.

It is of temporary value at least in pernicious anaemia.

It offers more in blood stream infections than any agency at our command.

It is a simple surgical procedure and by the Unger method is almost devoid of severe reactions.

A METHOD FOR SUB TOTAL HYSTERECTOMY

By

DAVID WALLEY, M. D., F. A. C. S.

Jackson, Mississippi

The first abdominal hysterectomy successfully performed was by Freund in 1838. He established a routine by ligating the vessels. It became recognized then as an established procedure although the majority of surgeons still did hysterectomy by vaginal route. Kimball in 1853 did the first extirpation for fibroids and shortly after Ward Burnham reported a series of 15 cases with three recoveries. In 1863 Koeherle reported a series of fifty cases on record up to that time. In 1873 Peari's work put the operation upon a scientific foundation through the extra peritoneal treatment of the stump. And the next contribution of importance was that of Hegar, who in 1879 cauterized the stump and stitched the peritonum about it. This procedure was followed by Emmet and in 1890 by Gaffi, who completely covered the stump by definite peritoneal flaps. In 1878 Guesrow had begun conservative surgery of the uterus, reporting at that time seventeen myomectomies together with 55 sub-total hysterectomies and a few years later Bigelow collected 573 conservative operations with 312 recoveries. The first hysterectomy for fibroids with extirpation of the appendage appears to have been carried out in 1888 by M. A. D. Jones, though Bardenheuer performed a similar operation in Europe about the same time.

Polk and Baldy made almost simultaneous reports in 1893 on the value and method of hysterectomy for inflammatory conditions. Thus introducing a new indication. Extirpation of the ovaries had become an accepted procedure in pelvic peritonitis, but the proposition that the uterus be removed at the same time brought into question the relative value of this organ in the general physical economy. In some respects the problems then developed have not been settled up to the present day, although the unimportance of the uterus after removal of tubes or ovaries is no longer doubted.

Freund's operation has been improved upon very little up to the present time. He cleansed the vagina antiseptically. The abdomen was opened in the Trendelenburg position. The broad ligaments were ligated on both sides. The peritoneum was reflected in order to expose the anterior vaginal vault and in closing drew the stump of the broad ligament down to the vault.

Sub-total hysterectomy has been carried out exactly as this up to the point where the uterine arteries have been ligated and the lower portion of the broad ligament divided and the walls of the cervix exposed the vesical portion of the peritoneum has been stripped down for a short distance. Some operators, notably Noble and Watkins, do not reflect the peritoneum any farther than the wall of the bladder itself, preferring to amputate high and in this way making it unnecessary to strip the

bladder away from its uterine attachments, thus doing away with post-operative vesicle symptoms to a large extent. The uterus is now amputated with a scalpel by a wedge shaped incision downward through the anterior cervical wall first, then through the posterior wall. Some operators make this incision very deep, coring out the cervical canal so that the greater portion of its mucous lining is removed.

The question of the best manner to suture the stump and to fix the broad ligaments on either side now arises and in considering this we think of the best way to minimize (A) the danger of infection from the cervical canal; (B) the danger of post-operative hemorrhages from the uterine and ovarian vessels; (C) to support the cervical stump; (D) to cover up all raw areas, thus peritonizing the pelvis.

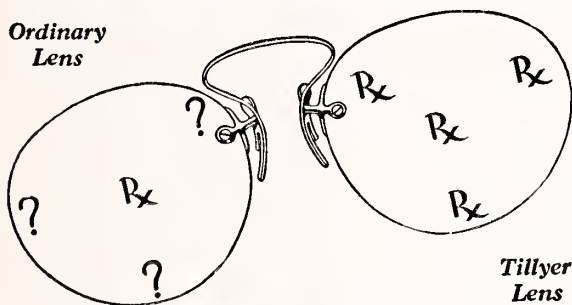
The cervical canal is usually cauterized with actual cautery or with carbolic acid or iodine and the stump sutured with double rows of sutures closing the cervical canal. The uterine arteries are tied with separate sutures on either side. The broad ligaments ligated and pulled down to the center of the cervical stump where they are fixed. This has fallen into disrepute in the last few years and the accepted method I believe at present is to fix the broad ligaments and whatever adnexa that is left to either side of the stump, thereby obviating the possibility of a sluff by too much tension. The last step is to cover the cervical stump by suturing the reflected peritoneum from the anterior part of the uterus to the posterior wall of cervical stump.

The indications for hysterectomy are found chiefly in three conditions. First, inflammation; second, benign neoplasm; third, malignant growths. I am not going to describe the various conditions which indicate hysterectomy since those conditions are familiar to all.

I have taken up considerable time in giving the history of the hysterectomy and describing methods up to the present time. I have been doing recently an operation which I believe offers an improvement on the method described in our present day literature. The operation I propose to describe is a sub-total hysterectomy only, as you know the post-operative dangers of a hysterectomy are mainly infection from the cervical canal and hemorrhage from the uterine and ovarian vessels. I do the operation just described with this exception: I make a posterior flap about 1-16 of an inch in thickness and sufficient length to completely cover the cervical stump, suturing it by interrupted sutures to anterior surface of the cervical stump. Then I bring my peritoneum fold over the entire field, covering the ends of the ligated ligaments making a complete peritoneal covering. I believe by the use of the posterior flap you, by contact, reduce the danger of infection and hemorrhage. You also do not have to make your anterior peritoneal flap as long as you do in the other operation. This, in my opinion, minimizes the danger of vesicle complications should there be infection. Of course I have not done sufficient number of these operations to compare results and I am only offering this to you for what it is worth.

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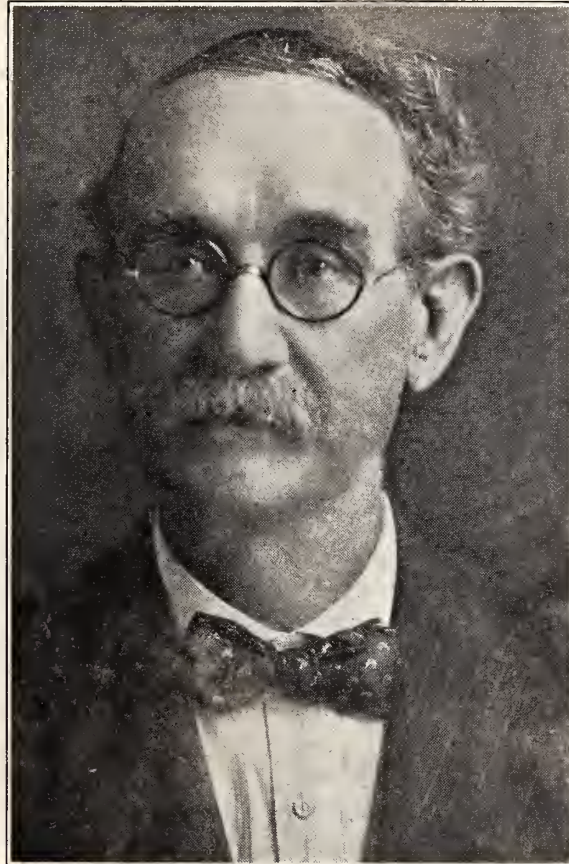
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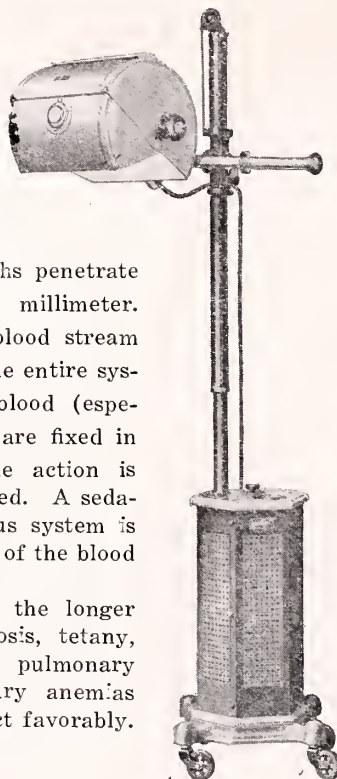
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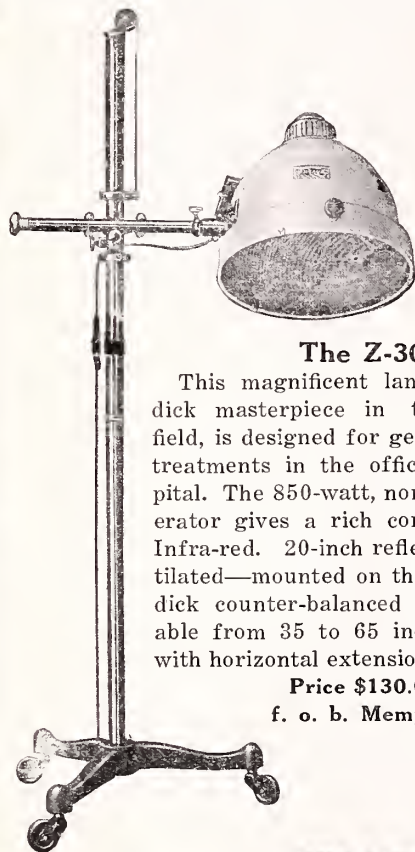
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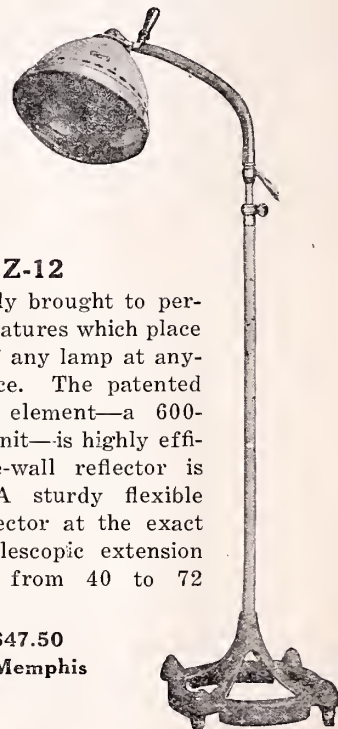
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The state meeting is offering you a splendid program this time. Do your best to attend.

The papers from all the local societies might be epitomized, and published in a state journal to the great advancement of medicine in our state.

If you think we should have a written history of medicine in Mississippi, let your thoughts be known at the state convention at Gulfport.

The resolutions committee spoke well and deservedly of the life and work of Dr. Elkin, in fact so well that there is really nothing left to be said, but to heartily endorse the resolution. The editor of this journal met Dr. Elkin for the first time on the state board, he giving the examination in surgery. He impressed us those two days as a man worthy and well qualified, a man of high standards, but a sympathetic human heart. For the succeeding ten years we knew him we had no reason to change this opinion. His good qualities simply grew and became more magnanimous as the days went by. He was not only safe, sound and progressive in the practice of medicine, but he was a likeable friend, an able business man, and a most unusually well balanced citizen. He was the type of man that makes a nation strong and forces the world to grow better. Dr. Elkin's personality will live in the medical profession in Mississippi on down the ages. We feel keenly his loss.

You are duty bound to attend your state convention, and then a few days on the Mississippi coast will be very rejuvenating to the hard working practitioner.

We are glad to publish a paper by Dr. Edley H. Jones of Vicksburg on "Paranasal Sinusitis in Children." This is a splendid paper, well composed, and we thank the doctor for it.

Think deep and straight in making up your mind as to whether you want a state journal of your own to deal with your own medical problems in your own way. Sum up the advantages and disadvantages and see which stands ahead.

You will read with interest and profit the surgical treatment of mastoid under local anesthesia, by Dr. R. E. Anderson of Jackson. The essay outlines the technique of injection of novocaine and the steps in the operation very clearly and classifies the cases in which local anesthesia is especially indicated.

We are pleased to publish a paper by Dr. C. P. Thompson, of Greenville, on "The Value of the Sedimentation Test in Infection." We can not speak with authority on this subject, but it sounds good and it shows that Dr. Thompson has a student's mind and is doing his bit to add to the progress of medicine. We would be glad to have brief, pointed discussions on this paper for our next issue.

If there be fads in surgery, the most popular one now is spinal anesthesia. The Bible says there is a time and a season for everything. There is an indication perhaps for almost every kind of anesthesia. Spinal anesthesia has had its waves for a number of years. No doubt it has been improved upon recently. No doubt there are cases in which it may be a life-saver, or at least the anesthetic of choice in the hands appear to the country surgeon that in some centers of the well trained. But at this time it would seem members of the profession are sufferers with an over-enthusiasm for spinal anesthesia. In the first place any method in surgery that can not be applied with safety by the average man, is to be looked upon with an eye of caution even in the hands of the expert. And, too, we must not forget that the spinal cord is the electrical trunk line from Muscle Shoals to all the surrounding territory. And it would appear that the Chief Engineer of the human organism was exceedingly kind in giving it such a strong fortification in its bony encasement. If you do get trouble with the main line you have something that is hard to fix, just about as precarious as the negro figured it would be to crank the airplane if it went dead. Anesthesia is exceedingly important to the patient. We should not depend entirely upon any one. We should use any of them cautiously and should attach more importance to them and strive to become more expert in their administration in the future than we have in the past.

The Southern Railway Surgeons held their annual meeting in New Orleans April 23-25 at the Roosevelt Hotel. Dr. W. S. Nash of Tennessee was president and he did the job with grace and efficiency and to a decided advantage to the association. The members were made to feel free and easy and the discussions were liberal and very helpful. Dr. Applegate, of Washington, Chief Surgeon, and Dr. Inge, of Mobile, Chief Surgeon of the M. & O., were present with their big hearts and genial personalities and did not leave anything undone for the comfort and pleasure of the surgeons and their guests. Dr. Lewis, editor of the International Journal of Medicine and Surgery, was present with his cordiality, magnetism and versatile tongue, to the edification of all present. Dr. Carroll W. Allen, of New Orleans, by invitation, delivered an address before the association on local anesthesia to the very great delight of the members who are exceedingly fond of this conscientious authority and likeable man. Dr. Denegre Martin, of New Orleans, was elected president, a loyal member of by-years, a veteran in general—a man interested in the progress of every phase of the field of medicine—a man broad minded, conservative and safe, and a man especially popular with the rank and file of the general surgeons. The next meeting goes to Knoxville, from which place Dr. Applegate

was called as chief surgeon twenty-four years ago; Knoxville, the home of the Newells, doctors, a city rich in southern hospitality, and a nestor of "pre-war, civil" culture and refinement. No doubt the record meeting of the association will be held at Knoxville next year.

PARA-NASAL SINUSITIS IN CHILDREN

TWO TYPICAL CASE REPORTS

By

EDLEY H. JONES, M. D.
Vicksburg, Miss.

In preparing this paper I have endeavored to keep in mind that the audience is composed of representatives of all branches of medicine and surgery and hope to strike the happy medium by bringing something worthwhile to those who see such cases and interesting to all.

Sinusitis is by no means rare in children, and occurs fairly frequently in infancy. While such conditions in infancy will not be discussed in this paper, it might be interesting to note that Dean held an autopsy on a 7-day infant, and found pus under pressure in the ethmoid and maxillary sinuses. Blomke, Bisi, Kahn and Theisen have reported severe infections in infants, with orbital cellulitis and other complications. Blomke's report included two necropsies.

At birth the maxillary, ethmoid and sphenoid sinuses are present. The maxillary and ethmoid sinuses are of sufficient size to be of clinical importance. Shea does not think the sphenoids at birth to be of clinical importance; Shaeffer thinks they are. The ethmoid and maxillary sinuses are usually fully developed at puberty; the sphenoid at 10 to 12 years. The frontal sinus usually begins developing between 7 to 10 years; development may not be complete till in the early twenties. Infection of the ethmoids may hinder development of the frontal sinuses: such cases are called infantile frontals. Heredity may have some influence in such cases. The frontal sinus is not usually considered of importance in children because of its late development. At times it develops early and infection is rather dangerous because there may be defects of the posterior plate, easily giving rise to meningitis. Oppenheimer pointed out that it seemed probable that many cases of meningitis in children are the result of inflammatory conditions existing in the sinuses, notably the frontals and sphenoids.

No presentation of sinusitis in children would be complete without a tribute to Dean, who has dominated investigation in this field, followed closely by Shea. Other otolaryngologists and pediatricians have followed in their footsteps, till now it is no longer an obscure field.

An infected sinus can and does act as a focus of infection in a child as well as in an adult and perhaps causes as great a variety of conditions. Recently Cone reported 71 cases of sinusitis in infants and young children admitted to the hospital with a diagnosis of arthritis, eczema, asthma, chorea, bronchiectasis, malnutrition, anhydremia, nephritis, pyelitis, celiac disease, and suspected brain tumor. He reported cure or great improvement in the majority of such cases; practically no im-

provement was noted with the eczema and chronic ulcerative colitis cases. The most commonly found conditions in my experience are pyelitis, general malaise, malnutrition, asthma, arthritis and nephritis. Cone states that parenchymatous nephritis in children is invariably caused by sinusitis and that the cholera infantum syndrome is caused either by sinusitis or mastoiditis.

Some observers believe that many cases of bronchitis are due to infection in the upper respiratory tract.

Climate seems to play some part in sinusitis, more cases being reported along the Mississippi river valley than in sections having higher altitudes. It is more frequent following influenza and the acute infectious diseases.

The vicious circle of sinus disease, giving rise to systemic infection and lowered resistance, thereby producing a tendency toward continued sinus infection is a problem requiring the best efforts of both pediatricians and otolaryngologists. While the diagnosis in some cases is quite obvious, in other cases it is not easy. A careful history is of great value. It is at times extremely difficult to get a reliable history; nevertheless an earnest effort should be made. Frequently the effort is well rewarded. Frequent colds, mouth breathing (especially after the adenoids have been removed), coughing at night (when not suffering with bronchitis), sneezing on arising, and a nasal discharge are all suggestive. Some of these children run a low grade temperature in the afternoons. Fretfulness, lassitude and a general feeling of malaise are often complained of. Headache is rather infrequent.

On examination, crusting is sometimes noted, just within the vestibule. The membranes are congested; ventilation is poor. The septum may be deviated and the turbinates may be hypertrophied. Discharge may be noted in the nasal cavities. Postnasal discharge is practically always present. The discharge may be mucous, mucopurulent or purulent. Diseased tonsils and adenoids are of great importance. The symptom of tenderness over the antrum is unreliable; some children are so frightened that they will complain of tenderness anywhere, while others will deny tenderness anywhere. Posterior rhinoscopy is difficult in young children and the use of the naso-pharyngoscope is almost impossible. In older children these methods may be used and give valuable information as to the source and character of the discharge as well as the degree of hypertrophy or hyperplasia present. Transillumination is of great value when only one antrum is diseased; in children it is usually more reliable than the x-ray. The x-ray's principal value, to use Dean's words, is "to tell whether or not a given sinus is present and if present, whether on an anatomical basis it has clinical significance." If an x-ray reveals a cloudiness that confirms the clinical examination, it is well; but if there is a variance between the two, the clinical examination should be relied on and the x-ray reading disregarded.

Unless the case is markedly advanced, or the sinusitis is acting as a focus of infection, causing a severe systemic infection, all cases should first be treated medically. Conservative medical treatment cures the majority of such cases. Colloid silver solutions are of value. I prefer Arbuckle's mercurochrome solution as nasal drops and have also used emulsion silver iodide combined with

ephedrine sulphate solution with good results. I have not found inhalations of any type to be of much value. Except in cases with a free discharge, I believe irrigations irritate the nasal mucosa, though of course they are less irritating than a purulent discharge. Suction has been strongly recommended by many observers, but I have not found it of value. The general treatment must not be overlooked. Proper dieting and free elimination are necessary. Cod liver oil and ultra violet baths are markedly beneficial. Autogenous vaccines are recommended by some observers, especially Mackay of England, but I have not used them except following operative cases. If infected tonsils and adenoids are present they must be removed, as they interfere with free ventilation and drainage and predispose to a chronic congestion of the nasal membranes with resulting sinus infection as well as giving rise to absorption of toxins, with resultant lowering of resistance. Dean reports cure of 80 per cent of his children's sinus cases by conservative treatment, combined with removal of infected tonsils and adenoids. My own experience bears this statement out.

If conservative treatment has been faithfully carried out for a reasonable period of time with little or no improvement, or if the sinus is the focus of infection causing some systemic condition, such as pyelitis, then we must resort to surgery. Close co-operation of the pediatrician and the otolaryngologist is necessary. The pediatrician must decide whether or not to operate; and if so, when.

Usually a simple intra-nasal operation is all that is necessary. A culture should be taken first. Then the antrum is opened through the inferior meatus, the opening enlarged and a small rubber drainage tube inserted. Antiseptic solutions may be injected through this tube daily, the antrum may be washed out with warm normal saline, and after a few days, the tube is removed. Colloidal silver solutions are usually employed, but for the past few months I have been using Hexylresorcinol solution (S. T. 37) with good results and greatest cleanliness. The nasal drops are continued. An autogenous vaccine may be prepared and used.

In cases of chronic suppurative ethmoiditis and sphenoiditis, or of a suppurative antrum that does not clear up after simple antrostomy, it may be necessary to do a radical operation. Such operations have been reported by several writers. It has been my good fortune not to see any such cases, though I have under observation at present two cases of suppurative maxillary sinusitis that have not cleared up, though operated over three months ago; a radical operation may be necessary to cure such cases.

The end results of sinus surgery in children compare very favorably with those obtained in adults. Shea states that operation does not keep the sinuses from developing; "In fact, unless the development of the sinuses is accomplished to within the range of the normal age of the patient, the infection can not be considered cured."

Herewith I am reporting two cases which may be considered typical; the first represents the type of case cured by conservative treatment, while the second represents the type necessitating operation.

CASE I. M. D., white, male, age 9, presented himself for examination July 23, 1928. Patient had a history of frequent head colds with headaches

located over the eye, nasal discharge, cross, easily irritated and listless.

The boy was well developed and well nourished. He was breathing through his mouth and his cervical lymph glands were moderately enlarged. His ears were negative to inspection. His nasal septum was normally straight, the nasal membranes were congested and ventilation was poor. There was a moderate amount of post-nasal mucous discharge, but I was unable to employ posterior rhinoscopy. The tonsils and adenoids had been cleanly removed two years previously. Transillumination suggested that both antra were cloudy, but showed nothing definite. The frontals had not started developing. I was unable to use the nasopharyngoscope. X-ray showed the maxillary, ethmoid and sphenoid sinuses present and of normal size for his age. The frontal sinuses had not yet developed. The inferior and lateral margins of the antra appeared very slightly hazy, but there was no definite pathology. The diagnosis of sub-acute ethmoiditis was made; I thought the antra were perhaps not well ventilated due to the hypertrophy of the middle turbinates. I gave him a few Dowling packs, prescribed Arbuckle's mercurochrome solution for home use, Oscodal tablets (cod liver oil), gave him a stock catarrhal vaccine and a series of ultra violet baths. The headaches quickly disappeared followed by a diminution, then a cessation of the discharge. His disposition improved and the listlessness disappeared. His appetite picked up and he began gaining weight. He was discharged as cured on September 8, 1928.

At the time this paper is being written he is suffering from an attack of influenza, but had had no trouble previously.

CASE 2. A. M. H., white, female, age 5, was referred on Sept. 26, 1926, by her family physician for examination of her tonsils. She had been suffering with pyelitis for the previous eighteen months. Careful dieting and treatment had improved her condition but for some months she had been having a little increased temperature (about a degree) almost daily. This temperature would come on usually around noon and disappear by 7 or 8 p.m. She was easily fatigued.

The patient was a delicate little girl, well developed and fairly well nourished, but had an anemic appearance. Her blood count showed a small diminution of red cells with a corresponding decrease in hemoglobin. Her leucocytes were a little high and the polymorphonuclears were slightly increased. Her urine showed a trace of albumen and a few pus cells.

Her ears were negative to inspection. The nasal septum was normally straight, the nasal membranes were slightly congested, but the ventilation was fair. No discharge was apparent. There was a profuse mucous post-nasal discharge. The tonsils were small and did not appear diseased. On everting them, liquid pus was found in the crypts. Transillumination showed a cloudy left antrum. I was unable to use either posterior rhinoscopy or the nasopharyngoscope. The cervical lymph glands were enlarged and slightly tender. X-ray confirmed the cloudy left antrum. The frontals had not started develop-

ing. No other pathology was noted. The diagnosis of left chronic maxillary sinusitis and diseased tonsils and adenoids was made.

Removal of the tonsils and adenoids and drainage of the left antrum was advised. This was done Sept. 29, 1926, and the procedure above described was followed. The culture revealed a mixed short chain streptococcus and staphylococcus aureus infection. An autogenous vaccine was made and administered by the family physician. 1% mercurochrome was injected into the antrum a few times; the antrum was irrigated a couple of times and the tube removed. 10% neo silver was prescribed for home use.

After thirty days the patient's temperature began decreasing; after two months she was free of temperature as many days as she had it; after four months her temperature remained normal and all symptoms of pyelitis had disappeared. I saw this patient a few days ago and she has had no trouble since, even though she had an attack of influenza.

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VALUE OF SEDIMENTATION TEST IN INFECTION

By

C. P. THOMPSON, M. D.,
Greenville, Miss.

It would seem from the title of this paper that I am a technician about to read a technical paper, but I am not a technician and this is not a technical paper.

Much of the value of any procedure depends on its simplicity and the scope to which it may be applied. This valuable diagnostic test can be quickly and accurately done, without laboratory equipment and without any special training in its use.

It can be done by the nurse, or by any one capable of drawing a little blood from the vein.

No explanation of the rapid sedimentation of the blood, so far as I know, has ever been offered, but the cause is known to be based on infection.

In an inflammatory disease in which pus is present, or in which pus is likely to occur, we get this peculiar reaction. We also do not know why we frequently get a rapid sedimentation in physiologic conditions of pregnancy and in the puerperium, so far this unexplained phenomena these two conditions are to be excluded insofar as the test being of any value there.

When a few drops of blood are mixed with a few drops of five per cent sodium citrate solution and placed in a test tube, in the absence of infection, a sedimentation of the red blood corpuscles takes place at a uniform rate.

We can positively exclude the presence of pus anywhere in the body if the sedimentation time is fifty per cent in 160 minutes or more. In the presence of infection the rapidity of the sediment accurately portrays the character of the infection we are dealing with, whether a simple inflammatory process or an infection of a more serious nature.

When a rate of thirty minutes or less is reached we know that we are dealing with pus somewhere. In a rate of thirty minutes or an hour we know that the infection is not of a virulent type. In a rate of fifteen minutes or less the patient is desperately ill and the condition is inoperable for the time being. Regardless of the appearance of the patient or the interpretation of other laboratory findings, if such a patient is operated a stormy time may be expected. There is no other procedure known that gives such a wide range of information. A blood count cannot always be depended on where the body resistance is overwhelmed by a particularly virulent infection the blood count will be deceptively low with a normal or sub-normal temperature.

A rapid sedimentation time will reveal the true situation. It is accurate and as has been said, it never lies.

A brief outline of the technique is as follows: All that is needed is a one c. c. tuberculin syringe, a small amount of sodium citrate solution, which should be renewed every two weeks, and a standard calibrated Lenzenmier tube.

Draw three drops of sodium citrate solution into the tuberculin syringe, puncture a vein and draw sufficient blood to make up to one c. c. Mix the citrate

solution and blood by shaking and inject through the needle into the Lenzenmier tube. Invert the tube a few times to insure thorough mixing, note the time and place the tube in an upright position. Midway in the tube is a red line and when the red corpuscles reach this line the test is complete. Subtract the time of beginning from the time it took to reach the red line and the number of minutes is the rate of sedimentation.

In inflammatory diseases we have come to consider rapid sedimentation a most valuable sign and especially in virulent infection where the blood count and temperature may be below normal.

In old pathologic changes and in quiescent infection where the blood count and temperature have been normal for weeks and months, this test will give us an accurate picture of the situation. In the differential diagnosis of a good many inflammatory diseases we are at times at a loss to reach any conclusion until the disease may be far advanced.

Pelvic inflammatory disease or tubo-ovarian disease may simulate an ectopic pregnancy so closely that it is hard to make a differential diagnosis unless this test is used. With pain in the lower abdomen, rigidity of the muscles and frequently an elevated blood count, but with a sedimentation time of ninety minutes or more we know that we are not dealing with an inflammatory disease but more than likely with an ectopic pregnancy.

In an ectopic pregnancy the sedimentation time will always run high, from ninety to 160 minutes, and a differential diagnosis can be positively made with this simple test. In pelvic inflammatory disease, and especially in those conditions that will terminate in abscess formation the sedimentation time will be extremely rapid, sometimes dropping as low as two or three minutes, and in the presence of pus never more than fifteen minutes.

To those who do surgery this is most significant as we are coming to know that it is not best to operate in these fulminating types of infection until the pus formation has had time to become sterilized, a matter of months. In those long drawn out conditions with a sedimentation time of less than forty minutes it is exceedingly dangerous to open an abdomen. Should they survive an operation at this time the entire lower abdomen will become a mass of adhesions that can never be broken up. It would be better for the patient to die on the table rather than to live the life they would have to live. When a sedimentation time of sixty minutes has been reached and not until then, regardless of the time it may take, will it be safe to operate. This time will indicate that a clean operation can be done with a minimum of adhesions. To determine by exploratory operation whether a pelvic condition is an ectopic pregnancy or an inflammatory process is bad practice. An ectopic pregnancy is essentially surgical and a pelvic abscess should be let alone until it can be safely done.

In pain in the lower abdomen run a sedimentation test. If it is rapid, thirty minutes or less, you may expect an inflammatory process with pus formation. If it is sixty minutes or more, it is a non-inflammatory condition and you will be better able to reach a diagnosis.

It is sometimes difficult to differentiate between a kidney or ureteral pain and an acute appendix. A small stone hung in the ureter in the area of the appendix

will sometimes baffle the best of us. We may have all the classical symptoms of an acute fulminating appendicitis and still not have it. Intense pain, constipation, vomiting, and a board like rigidity of the abdominal muscles, but if the sedimentation time runs high, sixty minutes or more, it is not inflammatory. Appendices have been removed and the patient not improved when a non-inflammatory disease could have been determined in a few minutes with a sedimentation test.

The cause of abdominal pain is not always intra-abdominal, and when it is extra-abdominal it is usually from a non-inflammatory condition. A Dietz's crisis or a rough stone in the ureter will cause excruciating pain that is apparently intra-abdominal. Gastric crisis from a Tabes Dorsalis will frequently simulate inflammatory intra-abdominal disease.

The pain from pneumonia and influenza is often referable to the abdomen. In a child this symptom complex can be very deceiving, giving us a rigid abdomen, a high blood count, and many of the symptoms of appendicitis. The sedimentation rate in pneumonia will be a little fast but not as fast as in suppurating conditions. In any pus condition, no matter where the pus may be, the rate will be rapid. In sinus involvement where pus is present, and this is at times an exasperating thing, unless we are specialists, will show a rapid rate. Even an abscessed tooth will increase the rate appreciably. I recently saw a man whose chief complaint was pain in the right lower quadrant, fever and vomiting with a blood count of 9000. It looked very much like I was dealing with an infected appendix, but his sedimentation time was 90 minutes, and did not fall under that reading. At the end of eight days a positive widal was obtained, and if it had not been for this test I might have had some explanations to make to the family.

The following case is of interest: A married lady contracted Neisserian infection from her husband and the tubes became involved. There was a considerable mass in each tube but no bulging in the cul-de-sac. She had rigors and high fever for several weeks, she became emaciated and it looked as though drainage would have to be done, but the sedimentation time was from 3 to 7 minutes and I did not operate for this reason. After several weeks she began to improve slowly but the sedimentation time was rapid and operation was deferred until a safe time could be reached. She continued to improve and after about four months was in good health. Today there is a little thickening in the tubes and broad ligaments, but she is in better health than she has been in years. Without this test to guide me, I would have probably operated this lady.

Inflammatory disease with pus formation anywhere in the body this test will portray the condition just as surely as though you had a placard with pus written on it sticking to the patient where you could read it. It is not meant for this test to take the place of or exclude any recognized laboratory procedure that is being done, but is to be correlated with them; the temperature, the blood count, the clinical history and any other test that may be of diagnostic value. In cases of emergencies such as a ruptured appendix or gall bladder, or perforation of a bowel, no laboratory test is of much value except to aid in diagnosis. But in elective work we should

get the patient in the best condition possible and it is here that the sedimentation test is of special value.

To those who have no laboratory close at hand, it is of distinct value on account of the ease with which it may be done. There will be no loss of time to the busy doctor who does not care or does not have time to do laboratory work. In a variety of conditions he is able to quickly determine the character of the disease and be able to give a pretty accurate diagnosis.

MASTOIDECTOMY UNDER LOCAL ANESTHESIA

By

ROSS E. ANDERSON, M. D.
Jackson, Miss.

In this paper I shall deal mostly with the simple mastoid operation which is usually performed for the relief of acute mastoiditis. I shall mention only briefly the radical mastoid operation which is usually performed for the relief of chronic mastoiditis. Acute mastoiditis most often occurs during the winter months and very often during the course of some acute febrile disease such as influenza, measles, pneumonia or scarlet fever. It may also occur during the course of typhoid fever, diabetes, or nephritis. Less frequently it occurs independently of any other disease. When it occurs during the course of any of the diseases just mentioned and a mastoiditis is indicated, the question of anesthesia is of great importance because a general anesthetic is contraindicated. It is in these conditions where local anesthesia is especially indicated and the results are usually very gratifying.

The patient should be given a hypodermic of morphine (gr. $\frac{1}{4}$) about half an hour before operation. In some cases one-half grain may be given or an "HMC" may be given. An "HMC" usually works well in extreme cases of nervousness. The head on the affected side is shaved and the skin cleaned with benzine and iodine, the external canal of the ear being cleansed with hydrogen peroxide. Other equally efficacious drugs may be used for this. One per cent novocain is the local anesthesia that has given best results in my hands. It is first injected under the skin beginning above the zygoma and carried down below the tip of the mastoid taking in a wide margin of tissue. After injecting under the skin, the novocain is next injected under the periosteum in the same area. Next deep injections are made along the posterior canal wall. After waiting several minutes for the novocaine to infiltrate the tissues, the operation may be begun since the bone does not have a nerve supply—hence no pain in the bone itself. A curvilinear incision is made upward behind the ear beginning at the center of the mastoid tip. The incision is made three-eighths of an inch posterior to the auriculomastoid skin fold and should be of sufficient length that the surgical landmarks may be well exposed after the tissues have been retracted. After the tissues have been retracted they may be kept so by one or more Jansen retractors. The whole field should be well exposed before the operation is begun.

Using a wooden mallet and a chisel the cortex is opened in the region of the mastoid antrum. Some operators prefer a hand trephine or drill. After the cortex is

opened the operation may be completed by means of curettes and rongeur forceps. The mastoid antrum is opened and the cells are removed all the way down to the tip. Every cell should be removed if possible. Sometimes when a few cells are left the patient will have a recurrence of the trouble. A rubber drain is inserted into the antrum and the wound closed by means of silk-worm sutures. The case is then handled as any other case so far as dressing, etc., is concerned.

If a radical mastoid operation is to be performed, it requires greater area of anesthesia since more tissues are involved. In addition to the anesthesia required for simple mastoidectomy deep injections of novocain are made anteriorly along the canal wall and the middle ear is anesthetized with a few minims of five per cent cocain. In addition to what was done in the simple mastoid operation the radical requires the removal of the malleus and incus, curetting of the eustachian tube so as to cause it to close, and the making of a skin flap. Some operators also make use of skin grafts.

Local mastoidectomy has certain advantages over the general. Not so much preparation of the patient is necessary, such as purging and dieting. There is rarely ever any nausea and vomiting. There is very little shock. The organs of elimination are not taxed so heavily. It takes fewer assistants. Does not require an anesthetist. The complications are fewer and milder. Local mastoidectomy is contraindicated in children except when it is imperative. Children cannot be reasoned with. Local mastoidectomy is hard to employ in certain adults who are extremely nervous. Most adults, however, can be operated under local. It is necessary to have the complete confidence of the patient at all times. It requires much time and patience on the part of the operator. Some of these operations require as long as one hour and a half to complete.

In a series of 15 cases of acute mastoiditis which I have operated under local anesthesia there was recovery in every case. Every case started under local, the same was completed under local. Only one patient complained of pain to any extent. There were only two serious complications—one a case of erysipelas and the other an involvement of the internal ear. These cases both recovered. Some of the patients had influenza at time of operation. One patient had advanced pulmonary tuberculosis. One patient who had a right mastoidectomy had to have a left mastoidectomy about two weeks later. One case was a sclerotic mastoid with a very thick, dense cortex.

I am presenting this subject to you because it is very interesting to me. I would not recommend local mastoidectomy in every case, but it is certainly worthy of serious consideration when we have a case of acute mastoiditis occurring during influenza, pneumonia, or some other disease where a general anesthetic is contraindicated.

(Read before Central Medical Society, Jackson, Miss., April 16, 1929)

OFFICIAL PROGRAM
Sixty-Second Annual Session
MISSISSIPPI STATE MEDICAL ASSOCIATION
MAY 14, 15, 16, 1929
Markham Hotel
GULFPORT

26th Annual Session of the
HOUSE OF DELEGATES
Will Meet May 14, 8 A. M.
WOMAN'S AUXILIARY—RADIOLOGICAL ASSN.

Ex-Presidents

1892-93—W. C. Kiger, Brunswick.
1894-95—P. W. Roland, Oxford.
1895-96—H. H. Haralson, Vicksburg.
1903-04—C. D. Mitchell, Fondren.
1906-07—W. W. Crawford, Hattiesburg.
1907-08—R. S. Curry, Jackson.
1908-09—J. W. Gray, Clarksdale.
1909-10—D. W. Jones, Jackson.
1910-11—J. W. Young, Grenada.
1911-12—D. J. Williams, Gulfport.
1912-13—S. W. Glass, Clarksdale.
1913-14—L. C. Feemster, Tupelo.
1914-15—J. S. Ullman, Natchez.
1915-16—I. W. Cooper, Meridian.
1916-17—T. M. Dye, Clarksdale.
1917-18—Willis Walley, Jackson.
1918-19—W. S. Leathers, Nashville.
1919-20—F. J. Underwood, Jackson.
1920-21—J. W. Barksdale, Jackson.
1921-22—Henry Boswell, Sanatorium.
1922-23—S. W. Johnson, Vicksburg.
1923-24—W. A. Dearman, Gulfport.
1925-26—G. S. Bryan, Amory.
1926-27—E. T. Ross, Hattiesburg.
1927-28—John Darrington, Yazoo City.

Extract From Chapter III of By-Laws

Section 3. Except by special vote, the order of exercise, papers and discussions as set forth in the official program shall be followed from day to day, until it has been completed, but when a section is not completed within the time assigned, it shall not be allowed to continue into that assigned to another section.

Sec. 4. No address or paper before the Association, except those of the President and Orators, shall occupy more than fifteen minutes in its delivery; and no member shall speak more than five minutes, nor more than once on any subject.

Sec. 5. All papers read before the Association shall be its property. Each paper shall be deposited with the Secretary when read and if this is not done it shall not be published.

Sec. 6. Each paper must be read by its author. If this condition is not complied with the paper shall not be published.

Sec. 7. No author listed on the program who fails to read his paper at the meeting shall be allowed a place on the program of the next annual meeting; but if the author, being unable to attend, shows his good intent by forwarding his paper to the Secretary in time for the annual session, he shall not suffer this penalty.

Officers, 1928-1929

President—W. H. Frizell, Brookhaven.
Vice-Presidents—J. H. Rush, Meridian; T. W. Reagan, Union; T. E. Ross, Jr., Hattiesburg.
Treasurer—I. W. Cooper, Meridian.
Secretary—T. M. Dye, Clarksdale.

The Council

First District—J. W. Lucas, Moorhead.
Second District—J. S. Donaldson, Oakland.
Third District—M. W. Robertson, Rienzi.
Fourth District—T. W. Holmes, Winona.
Fifth District—D. W. Jones, Secretary, Jackson.
Sixth District—W. G. Gill, Newton.

Seventh District—E. M. Gavin, Richton.

Eighth District—J. W. D. Dicks, Natchez.

Ninth District—D. J. Williams, Chairman, Gulfport.

EXECUTIVE BUSINESS

Tuesday, May 14, 8 a. m.

Meeting of Council and House of Delegates, Roof Garden, Markham Hotel.

Subsequent meetings will be arranged by the House.

Order of Business

1. Call to Order.
2. Roll Call.
3. Report of Secretary.
4. Report of Treasurer.
5. Reports of Committees.
6. Unfinished Business.
7. New Business.
8. Report of Council.
9. Report of Nominating Committee.
10. Election of Officers.
11. Selection of Place of Next Meeting.
12. Reading and Approval of Minutes.
13. Adjournment.

PROGRAM—MISSISSIPPI RADIOLOGICAL ASSN.

Monday, May 13, 7:30 p. m.—Ball Room, Markham Hotel

1. President's Address W. W. Crawford, Hattiesburg
2. Some Interesting Urological Problems

..... E. H. Linfield, Gulfport
Discussion to be opened by W. L. Britt and F. L. Van Alstine.

3. Fractures T. E. Ross, Jr., Hattiesburg
Discussion to be opened by J. W. Barksdale and O. H. Swayze.

4. The Heart G. W. F. Rembert, Jackson
Discussion to be opened by J. S. Gatlin and J. B. Howell.

5. The Modern X-ray Laboratory C. R. Stingily, Meridian
Discussion to be opened by J. E. McDill and Carl Day.

Secretary, Geo. E. Adkins, Jackson.

GENERAL MEETING—FIRST DAY

Tuesday, May 14, 1929—Session 9:30 a. m. to 12 m.

1:30 p. m. to 6:00 p. m.—Roof Garden, Markham Hotel
Opening Exercises

1. Call to Order—President W. H. Frizell, Brookhaven
2. Invocation Rev. R. V. Saylor
3. Report of Committee on Arrangements W. A. Dearman, E. H. Linfield, W. P. Sheely

Section on Eye, Ear, Nose and Throat

E. LeRoy Wilkins, Chairman, Clarksdale

1. Lye-Stricture of the Oesophagus D. C. Montgomery, Greenville
Discussion to be opened by H. H. West and E. F. Howard.

2. Early Recognition of Simple Glaucoma in the Prevention of Blindness (Lantern Slides) L. S. Gaudet, Natchez
Discussion to be opened by G. H. Wood and A. G. Touchstone.

Section on Medicine

W. A. Dearman, Chairman, Gulfport

1. Chairman's Address, "The Forgotten Doctor" W. A. Dearman, Gulfport
2. The Management of Pneumonia in Infants and Children in the Average Home F. G. Riley, Meridian
Discussion to be opened by T. D. Bourdeaux and N. C. Womack.
3. Syphilis of the Lungs H. L. Cockerham, Gunnison
Discussion to be opened by G. W. F. Rembert and J. W. Gray.
4. Achlorhydria With Special Reference to Gall-bladder Diseases J. P. Culpepper, Jr., Hattiesburg
Discussion to be opened by G. W. F. Rembert and J. S. Ullman.
5. The Early Recognition and Treatment of Creatinism G. Y. Gillespie, Greenwood
Discussion to be opened by J. W. Lipscomb and H. L. McKinnon.

6. Coronary Artery Occlusion, with Especial Reference to Symptoms G. W. F. Rembert, Jackson
Discussion to be opened by A. H. Little and Henry Boswell.

7. Treatment of the Diabetic in the Home Seale Harris, Birmingham
Discussion to be opened by F. G. Riley and Chas. LeBarron.

8. Endocarditis C. L. Simmons, Hazlehurst
Discussion to be opened by J. S. Ullman and E. B. French.

9. Acute and Chronic Colitis in Infants and Children Joe E. Green, Richton
Discussion to be opened by R. W. Burnett and H. F. Garrison.

10. The Treatment of Primary and Secondary Pneumonia W. L. Little, Wesson
Discussion to be opened by O. N. Arrington and D. W. Jones.

10. The Recent Epidemic of Influenza, and Its Complications W. L. Stallworth, Columbus
Discussion to be opened by N. S. Dickson and P. E. Holliday.

Evening Session, 8 O'clock—Tue-day, May 14, 1929

Roof Garden, Markham Hotel—Public Cordially Invited.

1. Invocation Rev. W. A. McComb
2. Address of Welcome:

On Behalf of the City of Gulfport Mayor Joseph Milner

On Behalf of the Harrison-Stone-Hancock

Medical Society W. A. Dearman, Gulfport

3. Response to Address of Welcome Henry Boswell, Sanatorium

4. President's Address W. H. Frizell, Brookhaven
5. Annual Oration—The Physician and the Patient

—Their Reciprocal Duties Alton Ochsner, New Orleans

GENERAL MEETING—SECOND DAY

Wednesday, May 15, 1929—Session 9 a. m. to 12:30 p. m.
Roof Garden, Markham Hotel

Section on Hygiene and Public Health

C. C. Applewhite, Chairman, Jackson

1. Chairman's Address C. C. Applewhite, Jackson
2. Modern Methods and Measures in Preventive Medicine F. M. Smith, Vicksburg
Discussion to be opened by J. W. Lipscomb and L. S. Lippincott.

3. A Practical Child Health Program for a Rural County J. B. Black, Murfreesboro, Tenn.
Discussion to be opened by F. J. Underwood and H. C. Ricks.

4. The Correction of Physical Defects of Pre-School and School Children in a Rural County J. H. Janney, Indianola
Discussion to be opened by N. C. Womack and W. H. Anderson.

5. Oxyperitoneum in the Treatment of Tuberculous Peritonitis W. B. McCorkle, Colorado Springs, Colo.
Discussion to be opened by H. R. Shands and Henry Boswell.

6. The Responsibility of the Medical Profession in Handling Venereal Disease Problem Frank L. Van Alstine, Jackson
Discussion to be opened by W. C. Rucker and E. H. Linfield.

- Brewer's Yeast as a Prophylactic and Curative Agent for Pellagra Paul S. Carley, Belzoni
Discussion to be opened by A. K. Barrier and R. D. Dedwylder.

Section on Eye, Ear, Nose and Throat

E. LeRoy Wilkins, Chairman, Clarksdale

Special Session—Gold Room, Markham Hotel

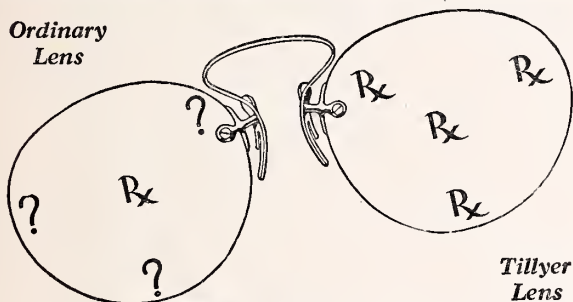
Wednesday, May 15, 1929—Session 9 a. m. to 12:30 p. m.

1. Chairman's Address E. LeRoy Wilkins, Clarksdale
2. Indications for Tonsillectomy H. L. Arnold, Meridian

Discussion to be opened by W. B. Dodson and D. W. Hamrick.

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3. A Fed Observations on the Maxillary Sinus
Edley H. Jones, Vicksburg
Discussion to be opened by Robin Harris and D. C. Montgomery.
4. Perimetry Jas. D. Perdue, Mobile
Discussion to be opened by C. A. McWilliams and Fern Champenois.
5. Nasal Surgery on Allergic Patients
B. S. Guyton, Oxford
Discussion to be opened by R. E. Anderson and W. A. Stevens.
6. Vincent's Angina R. A. Clanton, Grenada
Discussion to be opened by G. G. Armstrong and B. S. Guyton.
7. External Otitis: Its Cause and Treatment
G. E. Adkins, Jackson
Discussion to be opened by N. S. Dickson and H. R. Fairfax.

Section on Surgery

W. W. Crawford, Chairman, Hattiesburg

Session 2 p. m. to 5 p. m.—Roof Garden, Markham Hotel

1. Chairman's Address W. W. Crawford, Hattiesburg
2. Acute Pelvic Infection in the Female
A. G. Payne, Greenville
Discussion to be opened by H. R. Shands and J. S. Ullman.
3. Osteo-Chondro-Sarcoma of Knee
George A. Brown, Water Valley
Discussion to be opened by Frank H. Hagaman and George Street.
4. The Medical and Surgical Aspects of Goitre
C. F. Dixon, Rochester, Minn
5. Diagnosis and Treatment of Bladder Tumors
Paul G. Gamble, Greenville
Discussion to be opened by E. H. Galloway and I. C. Knox.
6. Caesarean Section H. N. Mayes, New Albany
Discussion to be opened by J. P. Wall and John W. D. Dicks.
7. Some Acute Conditions Within the Abdomen
J. W. Barksdale, Jackson
Discussion to be opened by S. H. Hairston.
8. Abdominal Drainage C. C. Hightower, Hattiesburg
Discussion to be opened by H. A. Gamble.

GENERAL MEETING—THIRD DAY

Thursday, May 16, 1929—Session 9 a. m. to 12:30 p. m.

Roof Garden—Markham Hotel

Section on Surgery—(Continued)

9. Abdominal Section and Its Consequences
O. N. Arrington, Brookhaven
Discussion to be opened by John Darrington.
10. Appendicitis R. H. Foster, Laurel
Discussion to be opened by John C. Cully and T. E. Ross.
11. Congenital Pyloric Stenosis
A. B. Harvey, Tylertown
Discussion to be opened by S. W. Johnston and E. C. Parker.
12. Some Diagnostic and Prognostic Blood Indications
Leon S. Lippincott, Vicksburg
Discussion to be opened by A. E. Gordon and W. H. Parsons.
13. Prostatic Obstruction W. H. Sutherland, Booneville
Discussion to be opened by S. H. McLean and T. W. Holmes.

WOMAN'S AUXILIARY

Mrs. M. H. Bell, President, Vicksburg.
Mrs. Henry Boswell, Secretary, Sanatorium.

Tuesday, May 14—Woman's Club House
Registration.

3:30 p. m.—Executive Board Meeting.

Wednesday, May 15

10:00 a. m.—Business Session.

4:00 p. m.—Auto ride along the Coast. Garden Party at Gulf Hills.

Thursday, May 16

10:00 a. m.—Sight-seeing drive. Golfing at the Country Club.



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THE MISSISSIPPI DOCTOR

VOLUME 7

BOONEVILLE, MISSISSIPPI, JULY, 1929

NUMBER 1

MY KIND OF A MAN

The kind of a man I like to know
Is a fellow who's shooting square,
Who plays his game with a steady hand,
And always will play it fair;
The chap who never will trust to luck,
Nor whines that he has no show,
The fellow with sand and with grit and pluck,
He's the kind of man I'd know.

The kind of a man I like to know,
Oh—I care not what be his name—
He may not bask in the world's applause
Or revel in gold of fame:
The fellow who's firm in the hardest test,
Though fierce be the gales that blow;
The fellow who's doing his level best—
He's the kind of man I'd know.

—Howard Biggar.

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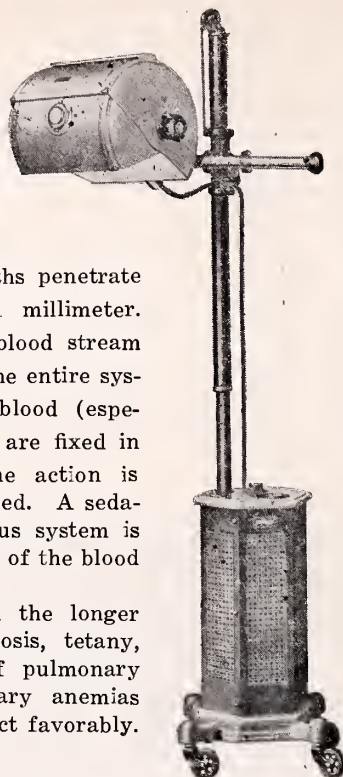
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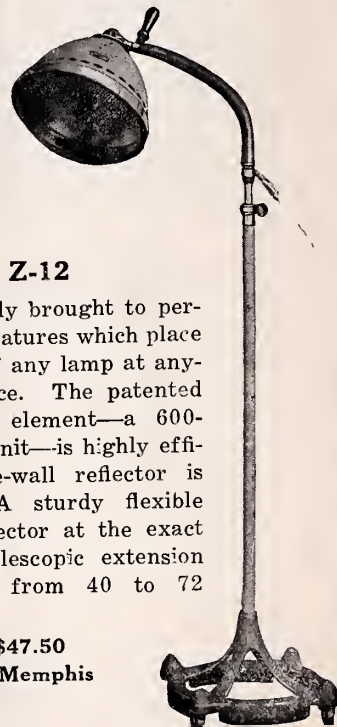


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We have learned in this city to foster a love for this village by the sea. It is a place of golden sunshine, where the pine trees kiss the sky, and the moon makes silver shadows on the green ships passing by. It is a wonderland of beauty, it is a kingdom by the sea, and the waves are calling, calling to the restless heart.

I am sorry, my friends, and I am sure you will regret that I have another engagement in a few minutes at Biloxi, and that I shall not be able to impart to you everything that I have in my heart this evening. I appreciate the fact that the program for this evening is to be non-technical. I had some experience in the medical profession. It was my earliest ambition that I might be one of those great servants of the public so beautifully described by the minister who delivered the invocation.

I had the experience of assisting a doctor, back in the cruder days of the practice in Mississippi, when we extracted a bullet from the buttock of a Negro with a pair of tooth-pullers and a razor, who was in a small jail up at Bond one Sunday morning. (Laughter)

I also had the harrowing experience of helping to amputate the leg of one of the employees at a mill, and I am sure some of you who have gone through that will appreciate with me the fact that I fell out during the ordeal. When I came back the next morning I found that everything in the little room of the drug store had been left for my care and that the man's leg was still in the bucket and I had to bury it. (Laughter) I went with a very tallow complexion upon my face with the cold sweat running off the end of my chin to bury my profession that morning back of the little drug store. (Laughter and applause)

I found very early that I did not have a stomach for this sort of thing. Therefore, I have a high regard for the men who follow this profession, more so than I have for those who have engaged in the other professions that I have since fallen into.

I have found very recently that a very eminent doctor in the city of Chicago has written a treatise, which, unlike many of these things that I have tried to fathom from the books of medicine and medical jurisprudence, reveals in the simple language of the layman some of the things about the human body that I am sure will strike a responsive chord in the few here tonight who are not versed in the lore of Gray's anatomy.

I beg pardon, though this is no a technical gathering, to offer to the deliberations of this medical group some of the things that this eminent doctor of Chicago suggests. He said, "In my study of medicine (I understand that everything that involves medicine has to be read here; so though I really know this, I shall refer to it), including anatomy, physiology and pathology, and in the long experience and practice of the profession, I have come to the conclusion that the human anatomy and the different functions of the organs of the body are not just what they ought to be. There are some unnecessary parts, and there are some misplaced parts.

"Why should both eyes be in the front of the head? Why not have one in the front and one in the rear, so that it would be possible to see where one is going and

where one is coming from at the same time?

"Why should the ears be on either side of the head? It seems to me that a good arrangement would have been to have them on the tips of the fingers, so that when they got cold one could put them in his pocket, and if one were going to have his pockets picked, he would be able to hear something about it.

"Then the nose is placed above the mouth, making it necessary to have a bridge between the eyes, so when one cries the tears will not run into one's mouth. Why not put the nose under the arm, so that when one wanted to blow it all he would have to do is just squeeze his arm against his side. (Laughter)

"Then, just why a man's tongue is loosely fastened at one end and loosened at the other, and why a woman's tongue is loose at both ends, I have never been able to understand. (Laughter) Why not have one's mouth at the top of the head, so that when a man is late for breakfast he can throw the food in the top of his head and eat it on his way to work?

"Why does a man at a certain age lose the hair on his head where he wants it and retain it on his face where he doesn't want it, making it necessary for him to wear a wig if he wants to look decent, and shave at least once a day?

"Why is it that at a certain age men lose their teeth which they need for health and comfort, and retain other parts of their anatomy which they have no use for? (Laughter)

"Why have the chest in the front and the back in the back? Why not have the chest in the back and the back in the front so that when one opens his coat he wouldn't catch cold, and if it was necessary to scratch one's back, it would save some painful contortion. (Laughter)

"Then, we always get kicked on the shin and very seldom get hit on the calf.

"Why should we be padded behind and not in front? (Laughter)

"Then, again, why should the feet protrude in front with nothing behind? What a convenient thing it would be when standing on a street car to have just as much foot in the front as the back, with a leg going down the middle, so you could just rock yourself to sleep. (Laughter)

"We know why some of the other things have been put there. We have the appendix because it is of a commercial advantage and the doctor makes no complaint." (Laughter)

Then, I have one thought that I should like to have you carry with you. I want to close my brief remarks to you, ladies and gentlemen, by speaking on the subject of what I think is Mississippi's greatest asset. We have never in this state of ours advertised to the world, in the smallest degree, those invaluable and latent resources that we should long ago have capitalized to the fullest. The world doesn't know, ladies and gentlemen, though we boast of it, that in the State of Mississippi we have produced, over a period of three years, two out of three of the healthiest boys and girls in the United States.

The other states in this Union do not know that when the call to arms came in our country that the camp established in Shelby in South Mississippi showed the highest health record of all the camps in the United States, and that it exceeded almost two-fold the one that approached it the nearest.

The people from other parts of this country have not learned that the government has established on our shores, after a very microscopic investigation, one of its great United States Veteran Hospitals, which shows one of the most splendid records in the United States.

The world is learning, but it has not learned in this country that this great sanitarium established at McGlenn occupies a unique record among institutions of its kind in the world. Harrison County, I believe I speak truthfully, has the oldest health unit in the term of years of consecutive operation in the United States. I may say in all frankness that we have in the control of our health department within this county one of the men who leads among all those who have done great pioneer work in this field. (Applause)

We do have, my friends, in the combination of climate, water and sunshine, especially in this great ultraviolet wave area, those ultimate things which they have been discovering year after year are just as important as the scientific facts which you are bringing to the surface in your investigation. They have found what the Great Physician, God Almighty, has put into the sod and put into the water, those qualities that have curative values. These people come here from afar, from the Northern States, from all over the country, and stay on this coast day after day and some of them never become acquainted with this wonderful water we have here that flows out from the great fissures of mother earth from its own pressure. Some of them come in and never even taste our water. (Laughter) You Mississippians have become acquainted with the wonderful water we have in South Mississippi. If some of you haven't tried it since you have been here, I do want to prevail upon you in all seriousness to take a bath before you go back and feel as you merge from the tub that wonderful, soft, refreshing feeling that this water we have along these shores brings to you.

I think we have, my friends, and I think you occupy a strategic position in imparting to the world that we have in Mississippi a condition which has made it the third healthiest state in the United States, based upon Federal census statistics, and the only two states exceeding Mississippi are those in the West with sparsely populated people. We have made that record despite the fact that half the population in this country is born black.

I wonder somehow as you go about your work and as you make your contacts over the country, if you couldn't sell the great idea of Mississippi as the healthiest state in the Union to the world. People are taking a new interest in health. It has become a sort of fetish today. They come from afar seeking all the advantages that sunshine and water bring to a tired frame or a weary body. Somehow I feel that you men and we men

of the press, and I feel that the business men of this state, can capitalize to a higher degree this one great asset that Mississippi can offer to the world and upon which we can build the foundation of a greater prosperity.

It has been done in California. It has been done in Florida. It has been done in the great spas and the great watering places abroad, but somehow we have taken these things for granted and we forget that the people in other parts of the country are subjected to goiter, one thing and another.

Our citrus fruits and the products from our sea are full of iodine. We do have in the products of our sea and from the sun those elemental factors and value that can build health into a human frame.

I think the whole profession of medicine is going through the same changes that other businesses are experiencing, if I may call it that.

Dr. George Vincent, I believe, who is President of the Rockefeller Institute, has within the last two years delivered a rather interesting address upon how the whole practice of medicine is changing from its individualistic former operations into one collective operation. I appreciate the fact that even here in Mississippi we are going through something of an evolution in this great profession of ours. I do believe, at the same time as you come together in your deliberations and as you seek with other people in Mississippi for some solution of our problems, that you men and women can be instrumental in calling to the attention of the world the great resources of Mississippi as they are measured in the gold of sunshine and in the inherent values of water supply.

I appreciate the fact that I am tuned up on this subject and I could go on indefinitely. I told you in the very beginning that you wouldn't have the privilege of hearing me very long, because I have another engagement.

I do want you to catch the spirit of these shores and I want you as Mississippians to know that we should develop that great love for our state in the words of a Mississippian who, once from our shores, went to California and sent me these beautiful lines on our state:

Mississippi, where a changing sapphire sea
Reaching to eternity,
Beats a tireless symphony;

Mississippi, where an alabaster strand
Stretching like a silver band
On the border of the land;

Mississippi, where the ivory dunes are white,
Swirl on swirl of gleaming white
Like a snowstorm in sunlight;

Mississippi, where the shining homes are flung
In the pineland, flower-flung
Jewels on Earth's bosom hung—Mississippi
(Applause)

THE TREATMENT OF CHRONIC PYELONEPHRITIS

By

O. S. McCOWN, M. D., F. A. C. S.

Memphis, Tenn.

There are three major factors for consideration in the treatment of chronic pyelonephritis. They are drainage, the infection in the urinary tract and foci outside the urinary tract. Since we have little in the way of specific medication for the infection, most of our efforts are directed toward improving the drainage from the infected kidney pelvis.

Hunner contends that partial or intermittent ureteral obstruction precedes infection in every case, that where ureteral drainage is perfect the kidney and pelvis will throw off any bacteria that may come to them. He also contends that most obstructions are due to stricture of the ureter, and that most strictures of the ureter are due to ureteritis caused by bacteria which come from distant foci. All agree that the infection cannot be eliminated nor the destructive process stopped if there is back pressure from an obstructed ureter. Congenital narrowing of the ureter is at times a cause of defective drainage and secondary infection.

Conditions outside the ureter may obstruct it. Among the most frequent of these may be mentioned uterine fibroids, especially when accompanied by inflammation and adhesions, and pregnancy. Cancer of the cervix extending to the ureter also causes ureteral obstruction, but here the disease of the cervix is of greater importance than the ureteral obstruction and treatment of the latter useless. Fibrosis from radium applied to the cervix may cause stricture of the lower ureter. Any growth in the neighborhood of the ureter may obstruct it by external pressure.

Aberrant vessels from the lower pole of the kidney to the aorta have been found to cause obstruction of the upper ureter. However, Kelly has always contended that even in these cases the primary obstruction is in the lower ureter causing dilatation of the upper ureter and ptosis of the kidney from its increased size, the ptosis in turn causing the ureter to hang over the vessel. Joseph A. Hyams has recently found aberrant vessels obstructing the lower ureter.

Kinks in the ureter are in most cases a result of obstruction rather than a cause. Only those kinks which are due to fixation of the ureter, interfere with drainage.

The brief outline of the causes of ureteral obstruction and its bearing upon pyelonephritis suggests the treatment. Treatment must necessarily be directed toward improving drainage, and directly attacking the infection. A cure can not be quickly achieved though ultimate success is the usual result if there is not already too great destruction, and the treatment is judiciously and persistently carried out. Even though a complete cure may be impossible, the patient may be relieved, and enabled to live out a long life comfortably.

It is not often possible to be certain about all fac-

tors in a given case in the beginning, so it is nearly always proper to use dilatation and lavage and watch the effect. Dilatation should be gone about gradually, and should not be started in a patient having fever, at least until after simple intermittent lavage or the indwelling catheter one or both has been tried. Acute symptoms will usually subside under these measures, and dilatation with lavage may be begun. All instrumentation must be done with the utmost gentleness. I use olive-tipped plain catheters up to size seven and olive-tipped bulb catheters from size eight on up. I insist on olive-tips because they traumatize the ureter much less than whistle-tips, and will often go to the kidney pelvis when whistle-tips catch on the wall and stop. For these reasons olive-tips give much less pain, and this is important at least to the patient. I usually carry the dilatation up to twelve or fourteen French.

Chiefly through Hunner's work we have come to look upon mechanical drainage as the all-important factor in the treatment. No one doubts the wisdom of making drainage as good as possible, but I treated many of these cases successfully by simple irrigations through No. 6 catheters before dilatation was considered of such consequence, and for this reason I still think lavage is an important part of the treatment. I use some one of the colloidal silver preparations, boric acid solution, or S. T. 37, 20% to 33 1-3% strength. In rare instances I use silver nitrate from .5% up to 2%. My objection to silver nitrate is that it hurts and sometimes causes considerable reaction. When silver nitrate is used, the injections should never be closer together than five days. Dr. J. A. McIntosh is recommending bacteriophage to be injected directly into the kidney pelvis in cases that do not respond to other modes of treatment. I have had no experience with it, but the reasons advanced for its use seem logical.

These measures should be supplemented by abundant water drinking, alkalies, and urinary antiseptics. I think I have gotten benefit from urotropin and caprokol. In cases with fever or very low kidney function, I do not give the antiseptics, but push fluids with or without alkalies. The urinary antiseptics are of very little benefit when diluted by a polyuria and should be given with fluids restricted so as to concentrate them in the urine. Vaccines have been of no help to me, nor has the intravenous administration of the dyes.

I will call attention to one thing that occasionally requires special attention. It is ureteral spasm. This is a peculiar thing and may come at any time without warning. It may block the ureter in any part of its course, seriously interfering with drainage and making it impossible to pass any kind of a catheter by it. It is a great temptation to try to force a catheter by such a spastic area, but this will only make the obstruction more complete. It is proper to try very gently to get by with a small catheter, but nothing more. In case of success the catheter should be left in for drainage and irrigation. In case of failure to get a catheter by easily, the effort should be immediately discontinued and opium or belladonna given with plenty of water. It is hard to sit idly by while the patient may be extremely ill from the in-

fection suddenly shut up in the kidney pelvis, but this is the best course. The emergency may become sufficiently acute to require nephrotomy or pyelotomy for drainage or even a nephrectomy in unilateral cases if the kidney is greatly damaged.

Under the plan of management outlined above most cases which have not suffered a great deal of kidney destruction will get well. Even cases with several ounces of pyonephrosis and very low kidney function will sometimes recover. It is occasionally possible to restore function though it may be impossible to entirely eliminate the infection.

It is not often necessary to empty the pregnant uterus prematurely because of pyelonephritis. These patients are generally relieved by the indwelling catheter and lavage, with alkalis and forced fluids. If, however, relief is not reasonably prompt in very sick patients, the uterus should be emptied without too much delay. Conservatism ceases to be conservative when it endangers life.

It is proper to mention here one other occasional complication, namely, acute exacerbation of a chronic pyelonephritis following labor. This is probably the result of trauma to the ureter during labor, causing swelling and obstruction. The patients have rigors and fever coming on anywhere from the first to the fifth day, but usually on the first or second day post partum. While these patients are frequently profoundly ill, they are promptly relieved by the indwelling catheter and lavage with forced fluids and alkalis by mouth.

In advanced cases our efforts may be futile and nephrectomy our only resource. The fact that we occasionally find cases in which the kidney is damaged beyond salvation before the patient is brought to the urologist is a strong argument in favor of early investigation of all cases with even mild symptoms suggesting kidney infection. The destructive process is usually very gradual.

It is possible that many of the cases of pyelonephritis with pyonephrosis and extensive kidney destruction seen in adults originate in infancy or childhood and that the destruction could have been prevented by proper urological treatment earlier. The same treatment used so successfully in adults can be applied with equal success in many children, especially girl children.

Whatever may be the role of focal infection in the etiology of chronic pyelonephritis, three things about it stand out when we consider treatment. First, many cases of chronic pyelonephritis can be cured by local treatment and general measures without regard to possible distant foci. Second, few if any can be cured by the treatment or removal of distant foci without local treatment of the kidney and ureter. Third, a few cases can be cured by local and general measures plus the removal of distant foci that cannot be cured by local and general measures without attention to distant foci.

This directly points out the plan of attack. If there is an outstanding focus remove it first, then treat the kidney and ureter. If no such focus exists, treat the kidney and ureter locally. If in doubt use your own judgment. There can be no hard and fast rule, but based on

my own experience, I am inclined to use local and general measures first, ignoring possible foci in doubtful cases, and in case of failure to get results, then have suspected teeth and tonsils removed if this has not already been done, and so on down through the list of possible sources.

I want to call especial attention to two organs as occasionally harboring infection which interferes with the successful treatment of pyelonephritis. They are the gall bladder and uterine cervix. In refractory cases I make X-ray investigation of the gall bladder a routine, and if the X-ray evidence of gall bladder disease is positive I remove the gall bladder. The cervix can be seen and a diagnosis of chronic cervicitis is easy. If present, I treat it by electro-coagulation. In this way we are able to cure an occasional case of chronic pyelonephritis which has persisted in spite of local treatments and general measures. This plan has an added virtue in that it rids the patient of diseased organs which are in themselves dangerous.

It goes without saying that evident obstructions to the ureter from without should be removed surgically. While such obstructions exist they constitute a very small minority of the total number of cases seen.

Occasionally it is necessary to remove a kidney for pyonephrosis or even rarely for pyelonephritis without great dilatation because of hemorrhage or sepsis which continues in spite of our best efforts toward conservation.

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CEASAREAN SECTION

By

V. B. PHILPOT, M. D., F. A. C. S.

I want to say to begin with that I have had practically no experience in obstetrics; also having had only nine cesarean sections, I doubt very much if this experience warrants any attempt on my part to write a paper on this subject. My reason for so doing is due to the fact that during the last two years, I have been called to assist some of my friends in general practice in abnormal cases of labor, where failure of efforts in the patient's home had been made to deliver women, and some form of surgical aid in the hospital was thought necessary.

In a series of six of these cases where we made an attempt to do versions, mutilating operation on the child, and instrument deliveries, in an effort to deliver through the natural passages, two of our patients were lost. This is a very high mortality, whereas, in nine cesarean sections, performed over a longer period of time, there has been but one maternal death. Therefore, I have become more or less convinced that in all probability we are doing too few cesarean sections.

In looking up literature on this subject we find, however, very few positive indications for such an operation. Jeff Miller of New Orleans, whose paper on General Consideration of Cesarean Section, I had the privilege to hear at the Inter-State Post Graduate Medical Assembly

of North America held in Atlanta last October, says that routine section is not indicated; that there must be in each case a careful study of the pelvic measurements, the size and shape of the cavity, the size of the child, and the type of its head. He also states that not every pelvic contraction is a positive indication for cesarean section, but as a general rule most authorities agree that a positive indication is when the outlet will not admit the passage of the child, whether due to pelvic contraction of various forms, or obstructing tumors, or abnormalities of the child. It is taken for granted that in the positive indications just mentioned, no great amount of trauma to the outlet has been done. In fact, Miller insists that even before there are positive indications, very few vaginal examinations should have been made. In reading his paper, one would almost come to the conclusion that there is no indication at all for a cesarean section. Miller, however, is one of our most conservative writers on this subject, probably a little too conservative.

Among the groups of miscellaneous indications quoted by Miller are as follows:

Inertia, dystocia, exhaustion, obstruction, ossified symphysis, anencephalus, hydrocephalus, adhesions, abdominal pain, laparotomy one year ago, children in rapid succession, wrecked health, arthritis, varicose veins, patient's desire for sterilization, patient's personal desire, epilepsy, low grade mentality.

Now may I say that Miller does not consider eclampsia as an indication at all for cesarean section. In this, I think, a number of other good men disagree with him. Some of you may have heard a discussion at our State Medical Association at Gulfport last month, in which pre-eclamptic toxemia was considered in many instances a justifiable indication for cesarean section; Dr. Shands of Jackson especially advocating cesarean section in eclampsia over any other procedure and reported a series of 64 cases of cesarean section (twenty-four of his own) with a death rate, as I remember, of not more than 3 per cent.

Another indication, and one which Miller failed to mention in his collection of literature, is a diabetic patient. In this day of insulin and more refined laboratory methods, especially blood chemistry, an operative procedure is relatively safe in a diabetic; and I am of the opinion that a diabetic patient, who may become pregnant, can best be treated at full term with a low cesarean section. I base my opinion, however, on only one patient of this group, who was on the verge of a comatose state from diabetes at about eight and a half months' pregnancy, in which a low cesarean section was done under a local anaesthesia with happy results. One of my neighbors, Dr. R. E. Priest, who had treated her previously to the operation and assisted me in the case afterwards, will give a more detailed account of this case in the discussion.

Now, getting down to the practical side of cesarean section, we have to consider the disadvantages: First, Shock. In my opinion, the shock of a cesarean section is

even less than normal delivery and is hardly worth mentioning, especially when it is so easy to do this under local anaesthesia. I know of no operation in the average patient more suitable to do under local than cesarean section, especially the low type of cesarean.

The second disadvantage is Hemorrhage. But this is not a serious complication, where a low cesarean section is done; since you have the field well exposed, and all the bleeding points can be ligated, without serious inconvenience.

The third and most serious complication to be considered in a cesarean section is infection. Polak gives the incidents of pathogenic organism in the uterus, as twenty-eight and eight-tenths per cent in uncontaminated cases and fifty per cent in cases in which the patient has been previously examined. So we can readily see that this is indeed a most serious problem. This, too, is better dealt with by low operation, recommended by Kronez or Beck and modified by DeLee, Hirst and others. The main principle of these operations being as follows: An incision is made below the umbilicus to the pubic bone, the uterus is exposed; the intestines must be very carefully handled, if at all; the abdominal cavity is packed off with moist gauze to prevent as much as possible any infected "spill" getting into the cavity. The bladder is separated from the uterus; a low incision is made through the uterine wall; and as a further preventative measure, DeLee uses a suction apparatus to empty the uterus of all fluids. This suction apparatus can be kept going during the delivery of the baby and placenta. The uterine incision is closed by two layers of interrupted chromic catgut and covered by suturing the bladder peritoneum above the aspect of the uterine incision.

This operation, or some of its modifications, has reduced the hazard of infection to an enormous extent. Some of our good men quote a mortality as low as one per cent. One man quotes ninety-seven cases with no mortality at all. But to be more accurate as to the mortality rate, I shall quote a half dozen taken from Table No. 1 in Miller's paper, representing the outstanding men of the country:

Kolak—2,000 cesarean sections. Maternal mortality, 7%; Fetal mortality, 5 5-10%.

Holland—4,074 cases. Maternal mortality, 6 8-10%; Fetal mortality, 12 6-10%.

New Orleans (principally at charity hospitals) 362 operations. Maternal mortality, 15 3-10%; Fetal mortality, 10%.

Williams—221 operations. Maternal mortality, 5-10%.

Bar—97 operations. No mortality.

Another contra-indication, as is given by some in cesarean section, is the possibility of a ruptured uterus in future pregnancies. The low incision has also the advantage of preventing this trouble for the reason that it is below most of the tension bearing area.

I mention, for example, one of my patients on whom I did a cesarean section four years ago because of a

contracted pelvis, and who, I was informed yesterday, has moved to California and has had two cesarean sections performed since then, and has at the present time three living children, all delivered through the abdomen.

So, after taking into consideration all the facts concerning cesarean section as compared with other modes of delivery, wherein there is considerable trauma to the soft parts, we are of the opinion that cesarean section has in all probability an equal break in advantages and if it could always be done before any appreciable manipulation through the vagina, the mortality rate would be cut to practically nothing. I think I will be very safe in saying that there is less danger in every way in cesarean section than from long drawn out labors accompanied by a great deal of trauma and shock either to mother or baby.

I reiterate that I know very little about obstetrics and have done very little of it, and I am not in position to advise those of you who are doing obstetrics in regard to your procedure, but should you have a patient where you have reason to believe a cesarean section might become indicated, I would caution you to make as few vaginal examinations as possible and to be very sterile in so doing, in which event should a cesarean section become necessary, the operation is a fairly safe procedure and the death rate in such cases will be exceedingly low.

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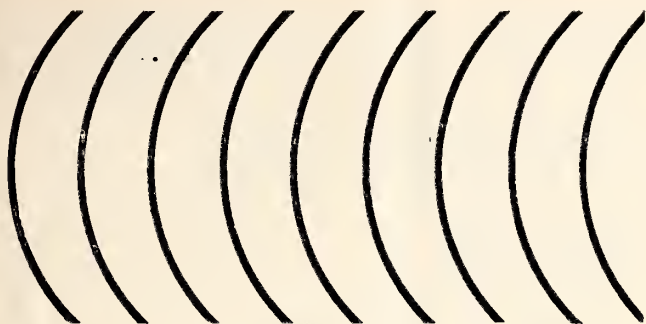
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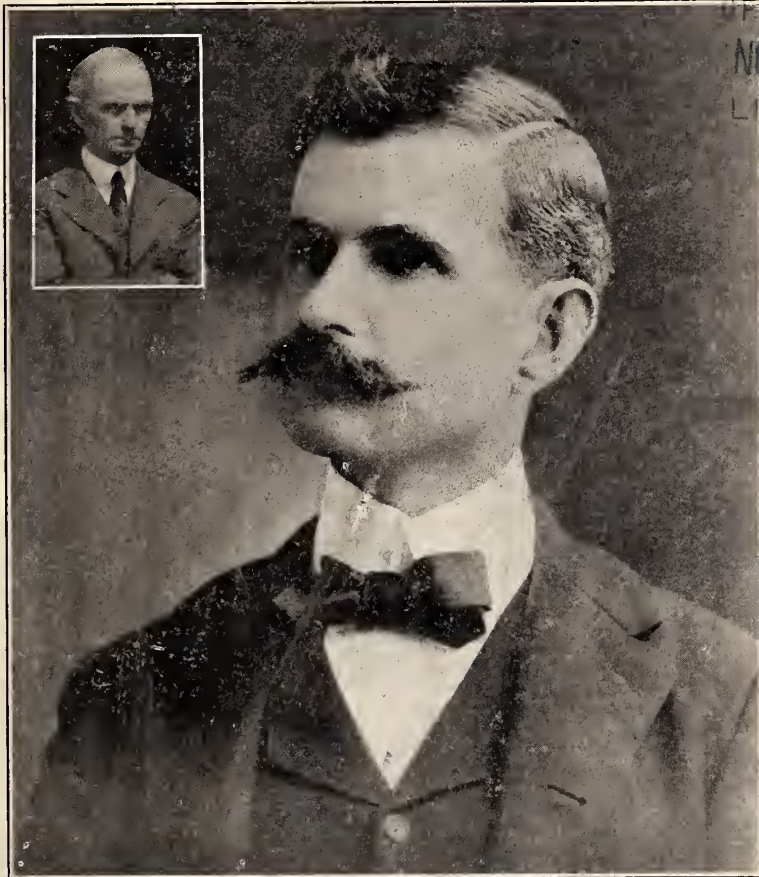
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THE MISSISSIPPI DOCTOR

VOLUME 7

BOONEVILLE, MISSISSIPPI, SEPTEMBER, 1929

NUMBER 3



DR. J. FRANK TAYLOR

In Early Practice, with Inset as he Appeared in a Recent Photograph

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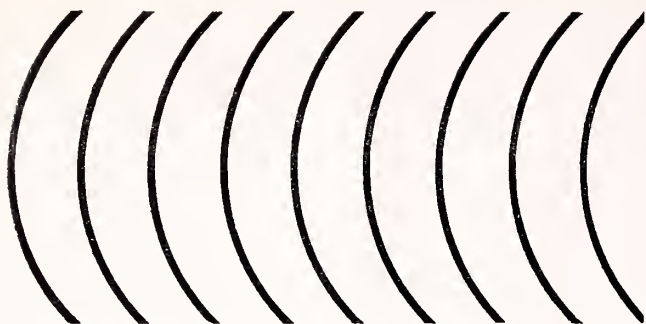
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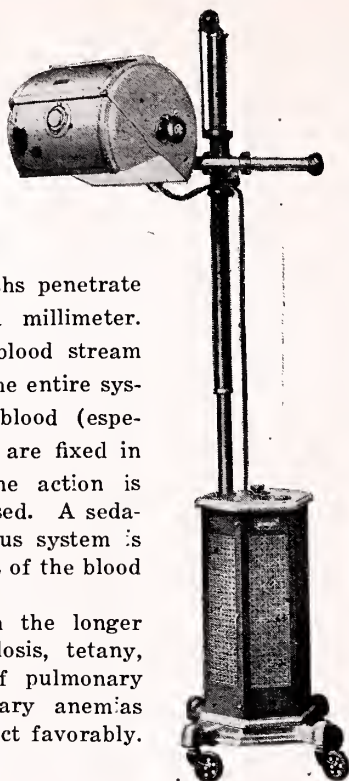
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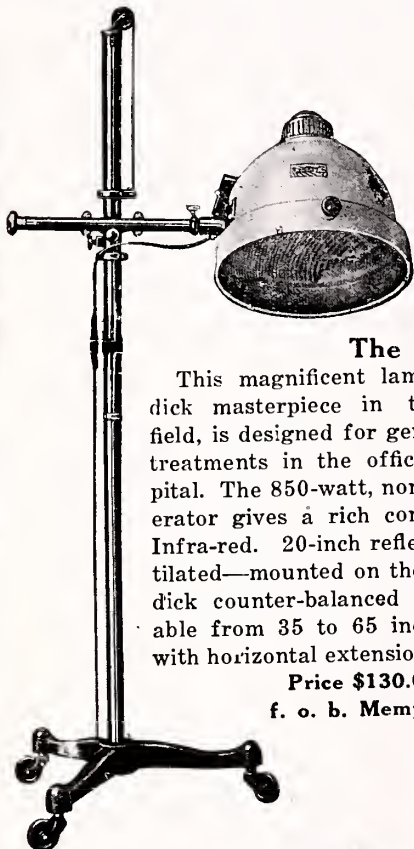
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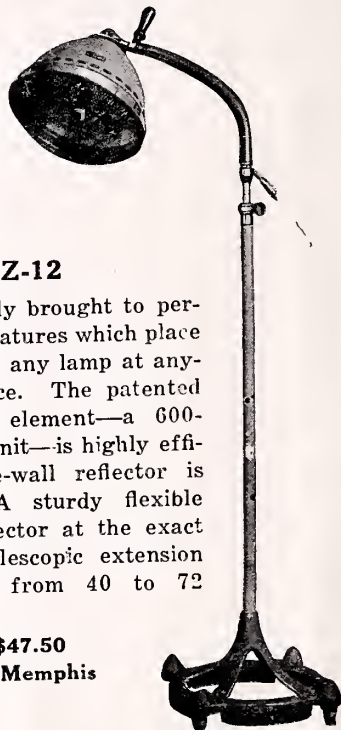


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We are delighted to offer to our readers in the September issue of the journal three splendid and instructive papers from the Gamble Brothers Clinic of Greenville, Mississippi. The Gamble Brothers are sometimes referred to as the Mayos of Mississippi. These papers by Drs. Hugh Gamble, John Fair Lucas, and J. G. Archer, will be read with interest and profit. This clinic has done a great deal for scientific and organized medicine in the state. Dr. Hugh Gamble is now president of The Mississippi State Medical Association and most likely he will do no little work in aiding organized medicine in the state as he has in this association of physicians and surgeons in Greenville.

We regret very much the passing away of young Dr. Herman McDonald, who was born and reared at Wheeler, Mississippi, where his parents still reside, but who was practicing in Alabama at the time of his death. Dr. McDonald took his literary training and his first two years in medicine at Ole Miss and graduated from Vanderbilt. He had been in practice about seven or eight years. Dr. Herman McDonald was a thorough and a brilliant student in college and he proved to be thorough, practical and successful in the profession. He was a friend true and one that you enjoyed. He was a credit to the medical profession and a citizen that was a splendid asset to any community, county or state. This journal offers its regrets and its sympathy to the bereaved wife and little

son, the father and mother and relatives.

medical journal that is to appear at an early date. It will be a kind of clearing house for all the other medical journals, publishing the titles of papers appearing in the other journals and discussing subjects of general interest to the entire medical profession. It will in no way interfere with any other journal. Its possibilities are unlimited in the furtherance of organized and scientific medicine. You will note in this issue of the journal a list of the editors.

We are mighty glad to have a paper from the pen of Dr. W. W. Robinson, of Memphis, formerly of West Point, on the pathology and radiology of carcinoma of the cervix. Dr. "Flip" as his class mates like to call him is a thorough student and when you read a paper from him you know it is one that has had unlimited thought and investigation. Early diagnosis by the microscope and radiation has done a wonderful lot in carcinoma of the cervix. Carcinoma of the cervix is the condition in which radium has its strongest indication. Radium has a right to have a chance at carcinoma of the cervix the same as does surgery and when it does, it is more certain of a cure in our opinion than is the latter. We still feel like Dr. Robinson partly belongs to the Northeast Mississippi Medical Society. We are glad to have this paper from his pen and we shall be glad to have him in person at our meetings.

The sudden and unexpected passing of Dr. Frank Taylor came as a great shock to Booneville and Prentiss County, and his going is a loss keenly felt. Booneville, Rienzi and Corinth, Prentiss and Alcorn Counties, have been largely known throughout the country by the prominence of the Taylor family. Dr. Frank Taylor was a nephew of Dr. William Taylor, whose name is yet a household word in Booneville and Prentiss County and whose son married the daughter of Dr. Crawford Long, of Georgia, the first to use ether as an anesthetic, one of the greatest discoveries in the medical profession. His cousin, Dr. Charlie Taylor, of Corinth, like Dr. William was a man of initiative, and outstanding ability in the medical profession. It would be hard to find a family, a connection who has had such a high average in their respective professions and in good, all-round citizenship. This is what counts. It is the high average for the family, for the connection, that marks the difference between high breeding and low, the difference between winners and losers, the difference between home and nation builders and the obstructors. Dr. Frank, as so many loved to call him, was prominent in this prominent family. He was able in his profession as long as he was in active practice. He was unusually diligent in business as a druggist. He was quiet and unassuming, but he kept well posted on all subjects of general interest. He was courtly and courteous; he was most delightful in conversation as well as instructive. His language was polished, chaste and select. He was most considerate of the feelings and the opinions of others, but when it came to right and wrong, his convictions were deep and strong. In all-round citizenship he was surpassed by few. The scholarly, the courteous, the considerate, the cultured Dr. Frank Taylor will be greatly missed, but his influence for good will not cease to flow down the human ocean of time.—Booneville Independent.

Dr. George W. Scally of Kossuth passed to his reward a few weeks ago. The end came suddenly. He was in the harness to the last. For a half century in round numbers he had been on the "job," for at least forty years, perhaps, in "the saddle." He loved his horse, he was devoted to his practice. He did not seek honors, he did not seem to care for fame, but with an active body, a mind alert and practical, and a heart that was big and sympathetic he found satisfaction in rendering service to the common every day folks in every day life. He spent the most of his time in practice in Alcorn, Tippah and Prentiss Counties, except for a few years in Mexico. Hardships in practice was his companion, but he was faithful and true to the trust. He found satisfaction in doing the best he could for the folk he loved. We believe his reward will be in the open and big. We extend our sympathy to the bereaved relatives.

"To be thrown on one's own resources," says Franklin, "is to be cast in the very lap of fortune."—The Kalends.

Men talk of victory as of something fortunate—work is victory; wherever work is done, victory is obtained. There is no chance and blanks.—Emerson.

Nature helps every man to become what he wishes to become. If you put forth no efforts, Nature decides you wish to become nobody and grants your wish.—Elbert Hubbard.

"The finest eloquence is that which gets things done; the worst is that which delays them."—D. Lloyd George.

CARCINOMA OF THE CERVIX UTERI

By

W. W. ROBINSON, M. D.

It is indeed a pleasure that I am given this opportunity to express my views upon a subject of such importance. In this presentation, since space is limited, I shall endeavor to discuss briefly and specifically only those factors which are essential to the proper diagnosis, treatment and prognosis of this dread scourge of women, a disease in which twenty per cent of the cases occur before the age of thirty-five.

The preliminary examination should be carried out bimanually both with respect to pelvic organs and rectum as well as inspection of the cervix with the speculum in situ. Depending upon the extent of the neoplastic growth, clinically the cases are classified according to the Schmitz grouping. Class I. The carcinoma is localized within the cervix and there is no fixation of the genital organs. It is rarely of the early ulcerating, but more commonly of the everting, cauliflower, papillary or proliferative type. These cases are termed "early" ones. Class II. The growth has extended to the uterine body, and the entire cervix is involved. The vaginal wall is boggy. It has become of the inverting nodular, ulcerative, or infiltrative type. These are termed "borderline" cases. Class III. The growth is found in the para-cervical or para-metrial tissues, or metastases to the pelvic nodes have taken place. Class IV. The disease is widespread with absolute fixation of all of the genital organs and involvement of bladder, rectum, lymph-nodes and remote organs—the so-called "frozen pelvis." Class V. There is recurrence after treatment. The last three groups are termed "advanced" cases.

If there are bladder symptoms other than those due to pressure, a cystoscopic examination should be done in addition to the routine urinalysis. A renal functional test and total non-protein nitrogen of the blood are included. Cultures of the cervical flora are very necessary in

practically all cases to ascertain if hemolytic streptococci are present. A biopsy is always done without hesitation, and is best performed with the electro-cautery, although unlike carcinoma of the breast, these cases are considered "open" ones, and it is safe to remove tissue with the knife, as vessels and lymphatics are sealed by infiltration and ulceration.

The histo-pathologic classification follows. All carcinomata arise from the muco-cutaneous lining of the cervix, and are divided into two groups. A. Primary solid, originating from the portio-vaginalis, or cutaneous surface. B. Glandular, developing from the mucous lining of the canal, or the tubular glands. The primary solid carcinomata may be uncornified spinous-cell, cornified spinous-cell, round or "transitional" cell, and "fat" spindle cell. The glandular are malignant adenomata, papillary and gelatinous adeno-carcinomas, solid adeno-carcinomata, and simple adeno-carcinomata. It is usually impossible to determine the histo-pathologic type, or formulate an opinion as to the origin of a growth except by microscopic examination of the tissue. The "malignancy index" is ascertained by the sum total of the numerical values applied to the tumor based on the special cell type, general type of carcinoma, absolute size of cells, irregularities in size, absolute shape and irregularities in shape, distinctness of outline of cells, staining quality, functional activity, absolute size and shape of nuclei, irregularities in size and shape of nuclei, absolute and irregular staining quality of nuclei, number of mitoses and prophase, as well as irregularities in form of mitoses, character of stroma, its vascularity, and the degree and character of round cell infiltration. The malignogram is divided into four groups depending on the sum total of the numerical values of the malignancy found, and classified as follows: 10 to 20, 21 to 25, 26 to 30, 31 to 40. This grouping simulates Broder's four grades of malignancy, but it assures greater accuracy, as more factors are considered in evaluating the degree of malignancy. While there is no relation between the clinical grouping of cases and the malignancy index, the latter is proportional to the type of cell found in the tumor. The greater the anaplasia of cell growth the higher the index of malignancy. On the other hand, after Group IV cases are excluded, the index directly influences the treatment and prognosis, or clinical result.

The radiation method of treatment of carcinoma of the cervix adopted in 1919, is past the experimental stage, and today it is so superior to surgery that within the last five years not one uncomplicated case has been treated surgically in several of the largest clinics, which statement includes the Mayo clinic itself. Those who would question the status of irradiation in this disease are referred to contributions to the literature by eminent gynecologic surgeons such as Kelly, Polak, Schmitz, Clark, Norris, Healy

and others. Surgery even in the early cases carries with it a mortality of 10 to 20 per cent, and the results are always doubtful, as collected records of Schottlander and others show that 50 per cent of the early growths have extended beyond the internal os uteri (a pseudo-barrier) to the uterine body itself, and at least one-third have metastasized to the pelvic nodes. This is particularly true of the adeno- and spindle cell types. Therefore, surgery should be restricted to the prophylactic treatment of correction of cervical lacerations and infections, and malpositions tending to stasis, as well as to cases presenting strong contra-indications to irradiation, such as radio-resistant growths the result of previous treatment by radiation, inaccessible tumors because of abnormalities and atresia of the utero-vaginal canal, and those complicated by inflammation of the adnexa. Surgery should be followed in these cases by external deep radiation as a resource against recurrence. Under no other circumstances is surgery to be used, unless the case is decidedly a rare and very early one of malignant ulcer and the **patient insists on hysterectomy**. Then, the internal radiation of radium application should precede the actual operation by two months. This aseptifies the vagina and cervical canal, and allows sufficient time for healing of the ulcer with tissue reparation before the manipulation and trauma of surgical procedure is enacted.

The uterus in its central location in the pelvis with its fibro-muscular walls is especially adaptable to radiation therapy. Radiologists from different sections of this country are all agreed that radiation should be a combination of external and internal in all cases of cervical carcinomata. The only divergence of opinion is in regard to which should precede or follow the other. Radiation in the form of deep Roentgen therapy and radium element applied in capsule must be used. With radium application alone the nicety of result is often very misleading. The apparently healed and contracted cervix may be called "the closed door," but "the horse, or cancer cell, is gone." There is already extension beyond the zone of radium influence, and the continuance of the patient's symptoms fully justify this conclusion. Colloidal lead injections are only in the experimental stage, and should not be used. Interstitial radiation with needles or radon seeds is mentioned only to be condemned, as the necrosis and sloughing from this is conducive to the production of fistulous tracts and the extension of infection into the pelvis.

In all but those rare early cases not accompanied by infection deep Roentgen therapy should precede as well as follow the internal application of radium. The Pfahler method of saturation of the neoplastic tissue is practiced throughout the course of treatment, both internal and external. This mitigates against the toxic effects of radiation as well as subjects the cancer cells to the effect of radiation while they

are in a state of maximum radio-sensibility. Vaginal douches of some antiseptic solution are given once to twice daily during the course of preliminary Roentgen therapy. This aseptic precaution destroys only the ordinary pyogens. Five to nine portals of entry are used depending on the size of the pelvis, and the treatments so planned that they will be completed in two weeks, but only seven to ten days are actually consumed. Each portal receives two treatments during this time, and from 200 to 250 milli-ampere minutes at 200 K.V., 50 centimeter skin-focal distance, with filtration through 0.5 mm. copper and 3 mm. aluminum. The depth dose through each portal at 10 centimeters is from 20 to 40 per cent of the surface intensity dose. The results of this preliminary radiation are usually most gratifying. The hemolytic streptococcus, that organism which is the cause of dangerous complications following radium application, disappears by the second week of treatment (Witherlee). In the majority of the cases the bloody discharge subsides as well as the pain, and the patient is so much improved that she is ready to lend her co-operation for the second part of the treatment. There is usually definite reduction in the size of the tumor, and the inflammatory extensions, which primarily were considered tumor metastases, have disappeared. A barrier of fibrosis and thrombosis vessels is laid down about the malignant growth and its extensions. Efficient local treatment can now be instituted by the operator.

Under gas anesthesia the evertng fungating mass, or it may be the inverting type, is completely ablated by electro-coagulation, care being taken to leave a wall of coagulation outside the growth in the healthy tissue. Under the same anaesthetic the radium is inserted. Regaud's method of application, or some modification of it, is recommended. The results obtained by this technique more than justify its universal adoption. A 27 per cent five-year salvage in cases, 90 per cent of which are inoperable when first seen, is sufficient to command the technique. A special applicator, which simplifies Regaud's method, and which has been fashioned after that of the late J. G. Clark of the University of Pennsylvania, has been devised by Swanberg. The uterine arm of this para-rubber covered 22-karat gold and aluminum T-shaped tube is graduated in sections so that it will fit snugly into the utero-cervical canal of any depth or diameter without dilating the cervix. This dilation should be avoided at all times if possible. The canal is first sounded for depth and size, and the applicator assembled accordingly. Small amounts of radium in the form of 12.5 milligram needles are employed in multiple foci or centers arranged in tandem in the uterine arm, and one in the cross-arm against the cervix. The gold and aluminum filtration is twice as great in the vagina as in the uterus itself. A Kaplan colpostat is then placed over the uterine applicator bringing one

12.5 milligram needle with like heavy filtration into each lateral fornix. Lastly, the vagina is ballooned with gauze. At the end of the second day the applicator and colpostat are removed and boiled. A cleansing douche is given, and the lubricated applicators are returned into position. This one change during treatment is usually sufficient. However, if the temperature exceeds 102, the apparatus is withdrawn, a cleansing douche given, and it is not replaced until the temperature falls. As a rule 100 hours are given over a course of five days, making a total of 7500 milligram-hours for the average case with six 12.5 milligram centers of radiation. The rationale of comparatively small amounts of filtered radium applied in multiple foci continuously over a relatively long period of time gives the highest percentage of hard gamma penetrating rays uniformly distributed to the growth and the zone of potential malignancy, and therefore destroys the greatest number of cancer cells without necrosis of tissues, and with the minimum of toxic effects and infection. The biological laws of Regaud follow that "a cure of cancer can only be effected by a single and continuous treatment of moderate dosage carried over a relatively long period of time." Carcinomatous cells must be in mitosis, or in the phase of radio-sensibility to destroy them. "The measure of sensibility is the difference that exists between the radio-sensibility of neoplastic tissue and the normal tissue." By applying small doses of radiation continuously, not only the cells undergoing karyokinesis, but also the resting or mother cells are caught in the stage of mitosis or activity, and eliminated. Fractional dosage, or single large doses applied over short periods of time and repeated, only produce radio-resistance of the cancer cells, which condition will persist indefinitely.

The post-radium Roentgen radiation is begun one week to ten days after the radium is withdrawn, and is similar to the preliminary Roentgen therapy. Two weeks are consumed in this treatment, giving a total Roentgen irradiation over each part of entry amounting from 800 to 1000 milli-ampere minutes, or nearly three erythema doses to the pelvis without ever approaching a surface erythema. The skin only shows deep tanning.

Excluding the clinical Group IV cases which are hopeless when first seen, the prognosis and clinical result are directly dependent on the malignancy index. Carcinomata with an index of 31 or higher furnish a bad prognosis, whereas those with an index of 10 to 20 offer a good prospect for cure in 60 per cent of the cases. Those with one of 21 to 25, Group II index, warrant a fair prognosis in about 40 per cent, and those with an index of 26 to 30 are benefitted in one-fourth of the cases. This resume includes the findings of Schmitz, Martzloff, Broders and Greenough. Carcinomata confined to a circumscribed area and having a low

malignancy index offer every hope for a relatively good result. Immaturity of cells with low differentiation and high degree of anaplastic changes are invariably associated with a high malignancy index. The evertng type, excepting the highly malignant spindle cell form, respond more slowly to radiation, but give the best end results, whereas the inverting types respond more readily, but the ultimate clinical results are not so good, as the adeno-carcinoma form a large percentage of the latter, and commonly metastasize rather early to the uterine body and parameria.

In most of the large clinics it is felt that the "early" and "borderline" cases of clinical carcinomata are so adaptable to radio-therapeutic procedures that little else is necessary, whereas later on in the course of the disease no other method of treatment can hope to accomplish anything.

CARCINOMA OF THE BREAST, AND INDICATIONS FOR EARLY TREATMENT

By

H. A. GAMBLE, M. D.,
Greenville, Miss

The cure of cancer depends upon its early recognition. One of the most outstanding reasons for the present high mortality from cancer is the length of time which elapses from the onset of the disease until treatment is instituted. One hundred thousand people in the United States succumb yearly to this scourge. Ten thousand of these die from cancer of the breast.

Cancer is a disease the etiology of which is unknown. Each case has to be examined and treated upon its individual merits. Heredity and previous history play practically no part in its diagnosis.

Unquestionably the lack of institution of early treatment of cancer has in the past been due to two factors. The first is delay upon the part of the patient for consultation, and the second—often ill advised advice as to a waiting policy for further developments.

Cancer of the breast occurs most frequently in the white race, in women rather than in men, usually in those over thirty-five years of age, and very rarely before puberty; more frequently in single and sterile women than where there has been repeated pregnancies and lactation. Heredity, according to some authors plays a very important part, acting according to the Mendallian laws. It is often secondary to fibro cystic disease of the breast, or intra-canalicular papilloma.

For the treatment to be effective the diagnosis must be made early, and the education of the public by propaganda, physicians, lecturers, etc., has caused every woman to realize the significance of any lump in the breast. When a patient presents themselves for examination with a history of a lump in the breast, even if it

has only been discovered that day, it is incumbent upon us to use every diagnostic means at our command to determine as soon as possible the nature of the condition. Should one not be able to reach a definite conclusion the patient should be hospitalized, the lump excised, and a histological examination immediately made. If the condition is non-malignant, the wound can be closed, should the diagnosis be that of carcinoma, immediate radical amputation of the breast is indicated.

A lump in any woman's breast is just as much an emergency, so far as her life is concerned, as is the recognition of a gangrenous appendix or a ruptured ectopic pregnancy, and those of us who may have advised patients to return from time to time, and from week to week to note the progress of the disease have been derelict in our duty to them, and their deaths eventually are just as much the result of incompetent and ill advised treatment, as would be a death from procrastination in the treatment of a ruptured appendix.

No one can tell how far cancer cells have permeated nor when emboli from the original focus may take place, and every day's delay only adds fuel to the fire. Time and again I have had patients ask me, "Can't I put this off for a week or for a month?" and the best illustration I can give them is that if their houses were afire, they would not wait until tomorrow to call the fire department to extinguish them.

Carcinoma spreads mainly through the lymphatics. Handley years ago enunciated his views as to the spread of cancer of the breast into the axilla, abdomen and chest by permeation through the lymphatic channels. It has been more recently demonstrated that to a certain extent the spread is also in the nature of lymphatic emboli, and where cancer metastasizes into the remote regions of the body, particularly as to the vertebral and skeleton bones, that this same process of dissemination through the lymphatics is primarily the main channel through which this takes place, although after reaching the bones themselves, it apparently by direct extension passes through the venous channels and is carried to the cancerous tissue of the bone.

Locally the spread of the cancer is by direct contiguity of structure, the cells as it were running riot and invading all normal structures with which they come into contact.

In order for treatment to be effective, it is absolutely essential that it be instituted before metastases have taken place. Once it has reached the axillary lymphatics in 80% of cases, a woman's life expectancy can be definitely determined at the time of operation. Not over 20% of these patients live through the five year period, whereas in early non-disseminated carcinoma with radical operation it has been shown that fully 80% are permanently arrested and

cured.

As to treatment, at the present time there is before the medical profession two main methods of treatment or combination of treatments. Namely these are radium and the X-ray, and operative. The claims of radiologists, when viewed through the light of experience offer faint hope for the sufferer with cancer of the breast. Lee of the Memorial Hospital of New York, in a recent comparison of 100 cases treated by X-ray and radium and 100 cases having no treatment at all reported by Deland, having approximately the same age and conditions of life, states that the average duration of the life of the untreated cases was 40.5 months, and the average duration of life of those treated with X-ray and radium was 44 months.

There is no question but that these physical agents have in other regions of the body a very material inhibitory effect upon the growth of cancer, and because of this fact many men advise post-operative radiation of the chest. The average percentage of patients living at the end of a period of five years from various clinics, taking all types into consideration has ranged about 35%. This, however, includes early cases, moderately advanced cases and advanced cases, and is hardly a fair comparison as regards the results of treatment of cancer in its earliest stages. As just said, 80% of those cases after having been operated upon before there is any lymphatic involvement, will remain free of cancer.

The prognosis is cancer of the breast.

Broders of the Mayo Clinic has shown by his work that the relative malignancy of cancer can be definitely determined from the histological examination. The relative malignancy of the cancer cells being classed as 1-2-3- and 4 according to their differentiation into the higher tissues, the hyalinization, fibrosis, and lymphatic infiltration.

Ewing of the Memorial Hospital has worked out a very similar scale. However, clinically, most of those of us who have had experience with carcinoma can make a more correct diagnosis by taking into consideration the clinical factors of age, lactation, rate of growth, character—whether serous or encephaloid, hard or soft, extension of the disease, and physique—particularly the adiposity of the individual.

Lee & Stubenbord worked out a formula along these lines and found that it was in its practical application far from accurate in the grading of the degree of malignancy than the histological study of the tumors can reveal.

This paper is based upon thirty-four cases of carcinoma of the breast that have come under our care. Of these thirty-four cases nine were not operated, four were advised against operation on account of the advanced stage of the disease. Two were referred to the charity hospital, and two were operated by a conferee, and one disappeared following consultation.

There were twenty-five who were operated upon and of the twenty-five eighteen are living at the present time at periods varying from a few months to seventeen years following operation. Seven are dead. One died of injury at an advanced age, but at the time had a recurrence of the malignant condition. Two died post-operatively, one from air embolism and the other from the advanced stage of the disease associated with shock. Of the four deaths which have occurred since operation, one was caused by a recurrent carcinoma with marked involvement of the axillary glands, the second a palliative operation where the glands were involved, the patient later dying from metastases to the brain, the third was an encephaloid type of growth in a young woman twenty-eight years of age with an axillary involvement, and the fourth was in a patient thirty-six years of age with small breast growth but early involvement of the axillary glands, she died from metastases to the lungs.

In no one of the patients was there a local recurrence in the scar or in the axilla, which tends to show that the metastases had spread beyond the scope of operation at the time which it was performed.

Of the twenty-five operative cases as just stated eighteen are living. Of those living, only two showed involvement of the axillary gland. There were sixteen in which microscopic examination did not show evidence of glandular involvement, and at the same time sixteen of these patients are living and well, besides the two which showed involvement of the lymphatic glands.

The factors which go toward the insuring of the recovery of these patients are first early recognition, second the type of growth, third the individual resistance of the patient, fourth age, and fifth presence or absence of lactation.

While the series here presented is small, yet we feel that it is no mere coincidence that four who have died from metastases to various parts of the body through the involvement of the axillary glands, and that only two out of the eight having axillary involvement should be still living beyond the five year period, and that all of those without axillary involvement should be healthy and well. I know of no more cogent reasons that one could give than are presented by this comparatively small number of cases as to the advantages to the patient from the early recognition and radical treatment of carcinoma of the breast.

RECTAL ANESTHESIA IN OBSTETRICS

By

JOHN FAIR LUCAS, M. D.

Greenville, Miss.

There is no excuse today for a woman not to have relief from the severe and agonizing

pains of childbirth. In every other branch of medicine the physician is anxious and willing to prevent and alleviate the pains of his patient, and in increasing numbers the members of the medical profession who do obstetrics are using some method of analgesia or anesthesia to alleviate the pains of childbirth.

Most women dread an oncoming pregnancy and labor on account of the suffering which they must endure during the actual confinement and the more intelligent women of today are demanding that they be afforded relief from this pain and suffering.

Men who are conscientious in their work however, will not be satisfied with a method which merely gives relief from pain, unless they are satisfied that it affords a maximum safety for both mother and child.

The method which I propose to discuss with you tonight appeals to me because of its safety and its simplicity, because it can be used in the great majority of cases, and because of the good results we have obtained by its use in about sixty cases during the past fifteen months.

The method was worked out by Dr. Gwathmey of New York with the co-operation of the staff of the New York Lying-In Hospital about your years ago, and is known as the Gwathmey Method of Syringistic Anesthesia. Up to last Spring when I was there they had used this method in over 6000 cases and at that time it was practically routine.

The technic is as follows:

When labor begins the patient receives a soapsuds enema until the bowel is clear; this being very essential for the instillation of the ether-olive oil mixture. When the patient begins to suffer and when the contractions are three to five minutes apart and lasting at least twenty to forty seconds and with the cervix two to three fingers dilated, one quarter grain morphine sulphate is given subcutaneously, and 2 c.c. of 50% Magnesium Sulphate deep into the buttock with a long needle. This is best given during an active pain and deep into a muscle. After the injection the patient should be kept quiet, placing cotton in her ears, turning off the lights and avoiding all unnecessary noise. Twenty minutes later give another injection of two c.c. of fifty per cent Magnesium Sulphate without morphine. If the effects of the morphine and Magnesium Sulphate it is best to wait until the effects begin to wear off before the rectal installation is given, and also the patient should be having good contractions coming every three to five minutes—but if twenty minutes after the second injection of Magnesium Sulphate the patient is still complaining, then the ether instillation should be given.

The installation consists of the following drugs: Quinine hydrobromide twenty grains,

alcohol three drams, ether two and one-half ounces, and olive oil qs. to make four ounces.

To give the installation properly one should have a funnel and about twenty inches of rubber tubing attached by an adapter to a number twenty or twenty-four French catheter. Place the patient on her left side with buttocks on the edge of the bed, apply vaseline liberally around the anus to prevent irritation if any of the mixture is expelled. Explain to the patient that the object of the instillation is to relieve her pains but do not promise her painless labor. Tell her not to press down with a pain but to breathe deeply with her mouth open and to draw up with her sphincter like she was trying to avoid expelling gas. Pour into the funnel enough olive oil to fill the catheter and get all the air out. Then with the gloved hand in the rectum insert the catheter well above the fetal head. Pour the ether mixture into the funnel and allow it to go slowly as the last of the mixture leaves the funnel pour in another ounce of olive oil. It should take about ten or fifteen minutes to give the installation. Hold a sterile towel over the rectum during the two or three following contractions for fear that the patient may expel some of the mixture. This should never happen if the catheter is inserted above the fetal head and the mixture is not given too fast. Another injection of two c.c. of 50 per cent sol. of Magnesium Sulphate is given at this time. The patient should now be kept as quiet as possible and no vaginal or rectal examinations made. In a few moments the patient will become drowsy, quiet and sleeps between the pains, stirring only when contractions occur. She is easily aroused, answers questions and obeys commands, but the next day she will tell you that she did not remember anything after the installation was given.

The effect lasts from two to four hours during which time labor progresses often so rapidly that the head descends in the perineum without appreciation by the patient, and also the physician unless he closely watches the case. If the effect wears off before the head reaches the perineum another installation can be given after two or three hours. This in my experience has rarely been necessary. Usually a few whiffs of ether are needed as the head descends over the perineum.

There has been no bad effects on either mother or child. Labors have not been prolonged and very few instrumental deliveries resorted to, and these in no way could be blamed upon the installation. Lacerations have not been more frequent than usual, and there has been no case of post-partum hemorrhage. Most infants have cried immediately, and the other responded in a couple of minutes and cried lustily.

In many cases the tendency was to shorten

the first stage of labor by permitting the cervix to dilate more rapidly, and the perineal stage is not prolonged as in other methods of anesthesia.

A few points should be especially emphasized. Be sure the lower bowel is thoroughly cleansed with the enema and that the solution returns. In giving the rectal installation be sure that the catheter is carried above the presenting part, and does not curl back upon itself—then if the solution is given slowly it will be retained.

Do not give the morphine too early. Wait until the patient is suffering and the pains are coming regularly every three to five minutes. Be sure the cervix is partly effaced and two or three fingers dilated. If this point is adhered to there will be no delay in the progress of labor. The cases of delay are due to giving the morphine and instillation too early. The ideal time is three or four hours before delivery.

Give the Magnesium Sulphate deep into the muscles if given subcutaneously the site of injection is red and tender for several days.

Caution the anesthetist to be very light with the inhalation of ether at the perineal stage as the patient goes under readily with a minimum amount and the baby will be born deeply anesthetized if too much is given.

The only obstetrical contra-indication is uterine inertia and this is eliminated before the first injection is given. Of course one would not think of giving it in case of colitis.

The drugs are easily obtained and inexpensive. The quinine is used to stimulate the contractions and increase the tone of the uterus. The alcohol is used to dissolve the quinine. The magnesium sulphate prolongs the effect of the morphine and increases or deepens the effect of the ether.

CARDIAC ARRHYTHIMIAS

By

J. G. ARCHER, M. D.,

It is always best to have a thorough understanding of the inner workings of any organ when treating that particular organ. So tonight I am going to review briefly the physiology of the heart, for when we come to the treatment of that most important organ many rather obscure facts will be cleared up, and the action and value of the one real heart drug, namely, digitalis, will be thoroughly understood.

As you will recall the cardiac cycle consists of a series of rhythmic movements, contractions or systoles alternating with periods of rest or diastoles. The several movements constituting the cardiac cycle take place in regular succession in the following order—auricular systole—ventricular systole, general diastole and so on. During diastole the auricles are filling rapidly and blood also flows into the ventricles through the auriculo ventricular valves—then along comes systole and the auricle contracts followed

very closely by contraction of the ventricles—and at the maximum contraction of the ventricles the auriculo ventricular valves if not diseased are forced shut and the blood is forced out into the aorta. The impulses originate in the sino-auricular node—a little mass of specialized tissue located in the upper part of the right auricle near the opening of the Sup. Vena Cava. The rhythmic stimulus of unknown nature elaborated in this center is transmitted along the auriculo-ventricular bundle to a secondary center, the auriculo-ventricular node or the node of Fawcett and from here distributed to the myocardial bundles of each ventricle by two main branches and then subdivisions. The systolic stimulus originates at regular intervals of about one second in the sino-auricular node (or the node of Keith and Flack) brings about contraction of the auricles at this moment, and it is transmitted along the auriculo-ventricular bundle to the auriculo-ventricular node (the node of Fawcett) such transmission normally taking about one-fifth of a second, it then brings about a ventricular systole through transmission of the excito-contractile impulse to the myocardial muscle fibers along the branches of the above mentioned auriculo-ventricular bundle. Both auricles and ventricles then lapse into a condition of rest and lose their irritability for a period of three-fifths of a second, after which the cycle is repeated again.

I have made the following diagram so as to represent the working time of the heart and the resting time, and will refer to this a little later on.

Now then just here let us discuss the action of digitalis. It has been definitely shown that digitalis has a direct action on the auriculo-ventricular conduction causing a depression of conductivity, but this does not cause a slowing of the rate of the ventricle if of sinus origin. You must remember that there are many stimuli going through the A-V bundle so that there is no slowing of the rate. However in such a condition as auricular fibrillation many extra stimuli are sent out and it is in such a condition when the stimuli are cut off that we get a slowing of the rate. A depression of the A-V conduction will slow the ventricular rate in auricular fibrillation. The ventricular rate in auricular fibrillation is proportional to or depends on the conductivity of the A-V bundle.

Digitalis also has some action on the heart muscle itself. This action has not been worked out quite as satisfactorily but has been proven to a certain extent clinically in disturbance of the muscle itself. Digitalis instead of stimulating the heart probably increases the efficiency. It has a depressing effect on conductivity in auricular fibrillation and probably has some effect on the heart muscle itself.

Disturbances of any part of this mechanism causes an arrhythmia of some kind and on further analysis plus clinical symptoms and physi-

cal examination one is able to locate more or less accurately the seat of disturbance. In recent years since the introduction of the Electrocardiograph more assistance is given in recognizing these conditions and more accurate diagnoses are made.

I will now take up some of the clinical disorders of the heart—the arrhythmias. There are seven types of cardiac arrhythmias—

1. Sinus
2. Extra Systoles
3. Paroxysmal tachycardia
4. Heart block
5. Auricular fibrillation
6. Auricular flutter
7. Pulsus Alternans.

In the time allotted to me it is impossible to take up each one of these and discuss them thoroughly so we will merely mention the least important and common and try to go a little deeper in detail concerning the others.

Sinus arrhythmias have no clinical significance—there is no disease of the heart—found in children, sometimes in adolescence and occasionally in adults—no treatment necessary.

Extra Systoles—second most common arrhythmias. This is a condition in which there occurs a premature contraction of the heart due to an impulse originating either in the ventricle auricle or the auricle and ventricle and so called. Ventricular extra systoles have relatively no clinical significance whereas auricular extra systoles are sometimes followed by auricular fibrillation.

The pulse following an extra systole is usually larger because the heart has been filled fuller. Extra systoles occur as results of infections, tobacco and alcohol in excess, eye strain, bad teeth, bad tonsils, constipation and flatulence. Of course in treating this condition eliminate the above. Disregard extra systoles if not causing trouble and no disease accompanying.

May use sedatives as Bromides, combat gas with phenal minims fifteen.

Mag. Magnesia.

Elixir Lac. Pep ounces 1½.

One teaspoonful three times a day after meals.

Paroxysmal tachycardia is a condition in which the heart takes on a new pace makes and beats rapidly and regularly usually beating 150-200. The characteristics of paroxysmal tachycardia are regular rapid rhythm with sudden onset and sudden offset. More common in adults.

Treatment of attacks.

1. Press on Vagus and a certain percent will stop.

2. No specific drug.
3. Apo-morphine.
4. Bromides.
5. Digitalis (sometimes helps).

Heart Block.

1. Partial.
2. Complete.

3. Potential.

Partial Heart Block.

Simply a dropping out of a beat from time to time.

Causes—Rheumatism, Diphtheria, Syphilis, Arteriosclerosis, and digitalis when wrongly used.

Complete Heart Block.

A condition in which all impulses from the auricles are cut out and the ventricles start their own impulses and beat slowly usually 35 per min. With this and the presence of extra waves in the jugulars of the neck are due to auricular beats can make diagnosis.

Complete heart block means drainage to the heart and calls for caution in using digitalis. However, digitalis may be used in an established Complete Heart Block.

Auricular Fibrillation.

The rhythm absolutely irregular. The auricles do not contract they fibrillate. The more rapid the rate the more irregular the heart. In this condition there is evidence of damage to the myocardium.

Treatment:

Rest in bed.

Morphine if indicated.

Digitalis 15 c.c. per 100 pounds of body weight can be given in one massive dose, or 50% of massive dose in the morning, and 25% in the afternoon, and 25% of the remaining every day until results. If massive dose is given do not give any more for ten days or two weeks.

This method should not be used if digitalis has been given previously for any number of days.

Auricular flutter.

The auricles contract more in mass and rapidly rate 200-300 per min. Ventricles respond with some degree of blocking. Less common than fibrillation, but more common than we used to think.

Treatment—Same as fibrillation. Give digitalis until flutter changes to fibrillation, then stop digitalis and the fibrillation will then change into normal rhythm.

Quinidine is the best drug in Flutter as it changes flutter into normal rhythm without going through fibrillation.

Pulsus Alternans means a bad myocardium, prognosis bad, do not live much over two years. prognosis bad, do not live much over two years. Rhythm of heart is regular and the heart cycle beats vary, strong beat followed by weak beat.

Treatment—Same as severe myocarditis.

Rest

Morphine

Digitalis

Easily digested diet.

To summarize the cardiac arrhythmias are:

1. Sinus arrhythmias.
2. Extra Systoles.
3. Paroxysmal tachycardia

4. Heart block
5. Auricular fibrillation
6. Auricular flutter
7. Pulsus Alternans,

and the one great cardiac drug that we can put most dependence in is Digitalis.

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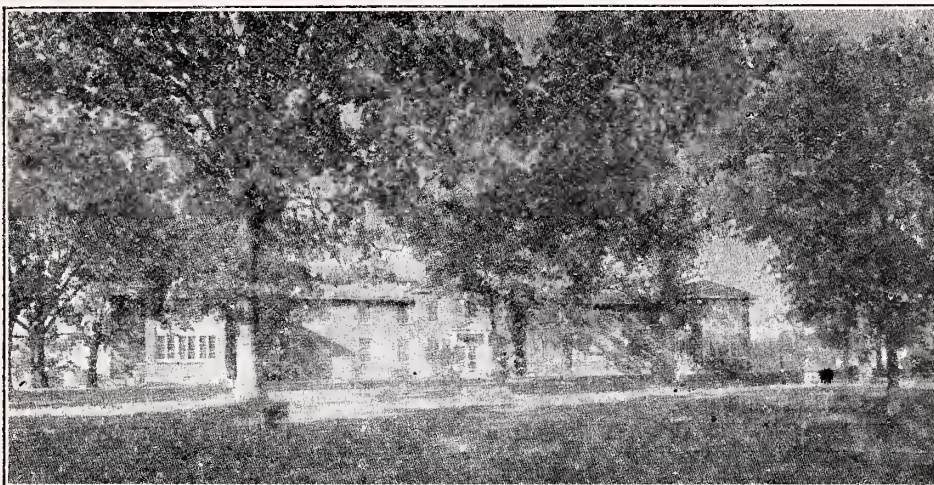
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"He has not served who gathers gold,
Nor has he served, whose life is told
In selfish battles he has won,
Or deeds of skill that he has done;
But he has served who now and then
Has helped along his fellowmen.

"The world needs many men today;
Red blooded men along life's way,
With cheerful smiles and helping hands
And with the faith that understands
The beauty of the simple deed
Which serves another's hour of need.

"Strong men to stand behind the weak,
Kind men to hear what others speak,
True men to keep our country's laws
And guard its honor and its cause;
Men who will bravely play life's game
Nor ask rewards of gold or fame.

"Teach me to do the best I can
To help and cheer my fellowman;
Teach me to lose my selfish need
And glory in the larger deed
Which smooths the road and lights the day
For all who chance to come my way."

—Anonymous.

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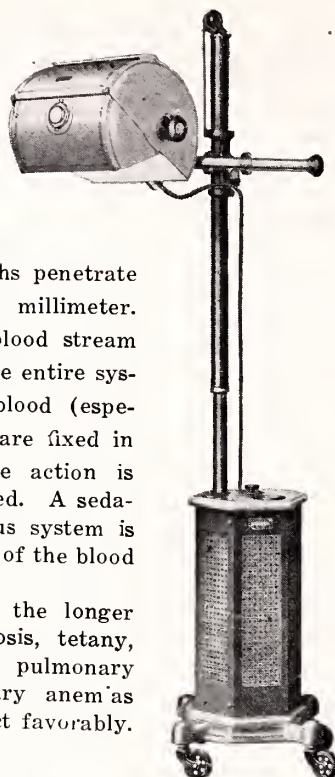
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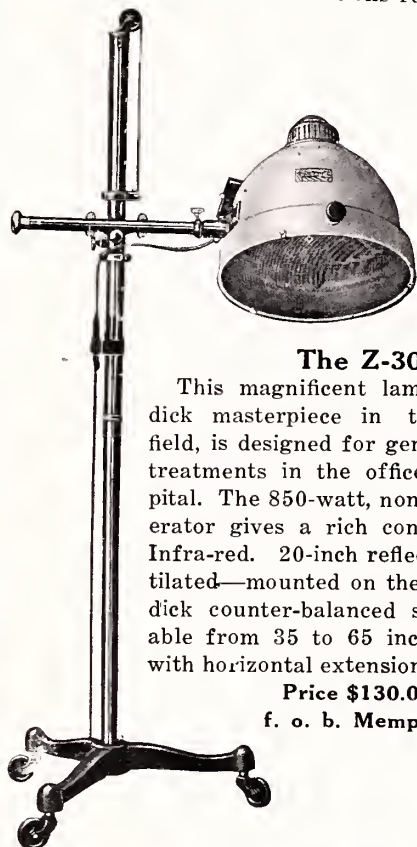
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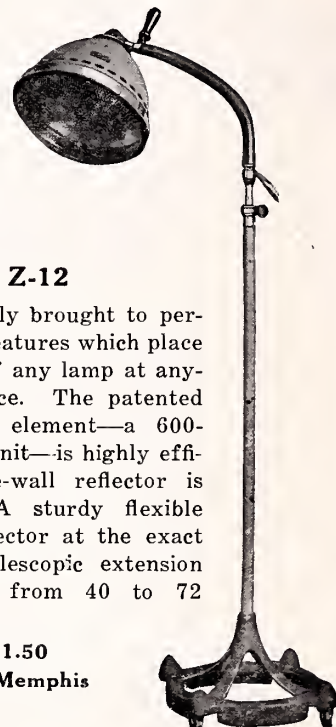
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Booneville, Miss., 114 Main St.

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Our next meeting will be in June at Houston, Mississippi. The Houston doctors do all things well.

When you see a fellow standing on the corner with a woe-begone look on his face, perplexed with fears and forebodings, the chances are that he is just wondering whether or not his "jake" is going to take on him.

You will read with interest and profit the address of Dr. Waller of Silver Creek, president of the Tri-County Medical Society, on the past and future possibilities of medicine. This paper shows that he has been doing some thinking. If we would all take a survey of what we are about and then work unitedly at the job, we would accomplish a lot more. We thank Dr. Waller for this splendid address. We congratulate the society on a membership like this.

It is a good time to read the paper on practical screening technique by Dr. Coogle, of Le-flore County. Every practitioner should have some idea about this work and should do their part in educating their clientele. Any country-man would feel insulted if a hog should walk in and help himself at the table, but many of them will push aside the housefly, which is not as nice, with but little care. Don't forget to speak some words of encouragement to your clientele on screening—its great importance.

We thank the Wallace Sanitarium for the renewal of their full page ad for the year.

Read the splendid paper on the use of sodium iodide in the treatment of orchitis by Dr. W. C. Pool of Carey, Miss. We thank Dr. Pool for this paper.

Our splendid and efficient Secretary has not asked us to say anything about "dues," but we have understood that we are somewhat behind this year. We have no doubt one of the best secretaries in the state. He gives his time gratis, and it amounts to no little. We should pay our dues promptly and help him, and help ourselves. Every practitioner owes something to organized medicine. His first duty is to his local and state societies. In this age no man can practice to himself and do himself justice in rendering service. If you have something that is good you should give it to your fellow worker. If he has something good, and everyone has, you should be broad minded enough to take it and utilize it. It has been said that you may judge a man by his clothes. These is no doubt but that you may judge a physician by the way he attends and supports his local and state society. No man will rise any higher in usefulness in the profession than he does in interest in these societies. The man who fails in interest in his local society will have what practice he has reduced. He is even now walking on down toward the valley of failure. He is think-

ing in terms of himself, but he does not realize that he must first improve himself in order to be able to help others. We have many calls, we have many duties, we are often slighted by our clientele in payment for our services; but let us not be neglectful of the mother of our profession, our local society. Let us pay our dues if at all possible, and let us do it cheerfully. Let us be more appreciative of our secretary who is giving his time and his talent without price. Let us be grateful enough to pay our dues and enclose a word of good cheer and appreciation. This will do you good like a medicine and will repay you three times.

You no doubt will read with interest and profit the paper by Dr. Hugh Gamble of Greenville, President of the State Medical Association, on organized medicine. It is able in content and well expressed. It came from a brain trained and experienced and a heart that vibrates with human sympathy. What Dr. Gamble has done for organized medicine speaks even louder than what he has to say.

As the essayist states, the local society, the county or group of societies, is the cornerstone to organized medicine. With organization, unity of effort, we can meet and solve our problems so much better, more promptly and more efficiently. As a general rule a man may be judged as to his professional efficiency by his loyalty to and activities in his local society. It is pitiful to see a man who feels that there is no good thing for him to get out of his local society. To have a part in your local society is a privilege and a profound duty. Usually the man who attends his local society will usually take an interest in his state and interstate. If you are called upon to write a paper, do your best. You know some one thing better than anyone else and though you maybe can not say it as elegantly as some one else, you can get the meaning over. Be true to your professional religion. Attend your medical societies and do what you can when you are called upon. Don't be grumpy when called upon for dues. Some men who are called upon for five or six dollars dues, will take the cramps, and the same year they will join a club or in some other way pitch in fifty dollars without a murmur.

Dr. Gamble is offering something constructive in his paper. Let us read what he has to say, and let us heed what he has to say.

An important question to come before the Mississippi State Medical Association at its next session, which will be held in Vicksburg in the month of May, is that of a state medical journal. The New Orleans Medical and Surgical Journal is one of the best in the South and our relations with this journal have been very pleasant, very cordially, and our present arrangements have some splendid advantages. But yet each state has its own medical problems and needs its own journal to use in solving them.

Just the publication of the scientific papers and the reporting of a little medical news, is a very small part of the work that a medical journal may do. The medical profession holds the greatest place in the social and economical life of our people. Its possibilities are unlimited if it will only go up and possess the land of opportunity. Its field of usefulness is a hundred times broader than it used to be. The profession must relate itself to the everyday problems of the people. Its work now is largely preventive medicine. It owes a debt to the social life of its clientele. It must function in their economical life. It must give modern medicine to the people at less cost to the individual, and with more profit to the physician. We must have organized medicine, we must have co-operative medicine, we must teach and practice preventive medicine. Our opportunities are unlimited, but the profession is being called upon to be all things to all human problems. The physician, to fulfil his obligations, must be liberally and broadly educated; he must be an economist, a sociologist, and a psychologist; he must be practical enough to relate them to the everyday problems of his clientele.

Right at this time there needs to be a harmonizing of the ultra scientific and the practical. Each one needs the other. Some of our ablest and best men in the profession are out at the cross roads and in the small towns. We need to record their observations and learn from them how to utilize knowledge. The instructor in the medical school needs to read what he has to say, or, better, spend three months with him each summer. The general practitioner in turn needs to have the new and technical knowledge from the man just out of school.

A state medical journal should publish a digest of all the good papers from the local societies. It should have a department of public forum for the discussion of problems of interest to the profession. It should have an editorial policy that would lead and develop and enlighten. There is plenty of work for a medical journal in Mississippi. It is just a question of whether we shall go forward and possess the land of opportunity, or wander in the wilderness of doubt.

The Northeast Mississippi Medical Society held its first regular quarterly session in Booneville on Tuesday, March 18th, at the new and commodious Methodist Church. The meeting was presided over by the president, Dr. K. F. McRae, of Belmont. Papers were read by Drs. McGahey, Stephenson, Strange, and J. P. Chapman of Birmingham in the afternoon.

Dr. Hugh Gamble of Greenville was the banquet orator in the absence of Dr. Seale Harris. He spoke on the "Relation of Organized Medicine to the Physician and His Obligation to It."

Our able and efficient mayor, Hon. J. B.

Alexander, delivered the address of welcome, and did it in fine style.

The scientific session was unusually good, and was attended by about fifty members with some visitors from adjoining counties and Memphis and Birmingham. The address of Dr. Gamble was very able. He was born and reared near Guntown and has relatives and many friends in this section of the state who accorded him a cordial welcome. He discussed medical problems of vital interest and emphasized the importance of organization.

The banquet was served in the dining hall of the church. Great credit is due the missionary societies for the splendid feed and the wonderful manner in which it was served. The broiled chicken, country ham, and striped ice cream were very pleasing to the visitors. Splendid music was rendered by the junior band of Booneville. This band is a credit to our town.

The visiting doctors were very extravagant in their praise of the banquet and very liberal in their tips to the missionary society.

Booneville was greatly delighted to have the doctors of Northeast Mississippi, and we extend them a standing invitation to return.—The Booneville Independent.

MAYOR ALEXANDER'S ADDRESS OF WELCOME

(Delivered at opening of medical meeting held here last week.)

Mr. Chairman, Ladies and Members Northeast Mississippi Thirteen County Medical Society:

As mayor of our town, and on behalf of our entire citizenship, I welcome you. We not only welcome you, but feel highly honored to have this distinguished group of physicians with us on this occasion.

We know that your stay with us must necessarily be short, as many of you, if not all, found it inconvenient to attend this meeting. Some of you perhaps have waiting unborn babies who cannot discover America until you return home, and some of you no doubt have the neuresthenics waiting at this moment in your offices, who will not leave until you have returned home and heard their tale of woe, as they are never happier than when telling you or some one else their ailments, and too, some of you have the really sick, who need your attention hourly.

Now, we want you to forget all of this for the few hours that you are with us, and assure you that our homes, our hotels, our cafes, our stores, our offices, and our banks are all open to you, and if you can put up the proper collateral, you might be able to borrow a few dollars from the latter. The mayor's office will also be open while you are here, and if you get into trouble I shall be glad to welcome you, and show you how sympathetic I am.

I want to take advantage of this opportuni-

ty to congratulate you on the progress your profession has made in the last twenty-five years. I am now thinking of the old-time general practitioner who rode horseback and over bad roads day and night and when he came to see us, he gave us calomel and blue mass for supper, castor oil and turpentine for breakfast, jerusalem oak candy for dinner, and quinine in black coffee between meals.

Now when we get sick, you doctors haven't time to come to see us, and we have to go to the hospital in an ambulance. If we get there before the other fellow gets our place you put us on a table, knock us cold, cut us up into sections, stick us back together, shoot us down the chute and holler "next." If we make our escape, we are fortunate, and if we do not make it, we are unfortunate.

Now, I have not meant to cast any reflections upon the old-time doctor for he did the best he could and served his country well, and saw hardships that you younger doctors will never see. Neither is it my purpose to criticize the doctor of today. I have a brother who is a doctor, and have inherited a doctor son-in-law, and reserve the right to talk about all doctors when I am well, and send for one quickly when I get sick.

Again I bid you a cordial and sincere welcome.—Booneville Independent.

SODIUM IODIDE INTRAVENOUSLY IN THE TREATMENT OF ORCHITIS*

By

W. C. POOL, M.D.,
Cary, Miss.

*Read before the Issaquena-Sharkey-Warren Counties Medical Society, November 12, 1929.

To begin with, part of the cases reported here are those with only the testicle involved, three of these; and the others had both the testicle and epididymis. For this reason I should have entitled this paper Epididymo-Orchitis rather than Orchitis.

Cases No. 1 and No. 2 following an acute mumps and No. 5 of the other cases were typical cases of orchitis with apparently no involvement of the epididymis. The other cases, of course, showed involvement of both. Also they showed positive Neisser stains. These cases were seen late in the disease and were in such shape that it was impossible to trace out all involvement.

From the information that I have been able to get together there are three modes of invasion:

1. Direct extension from urethra through lumen of the vas.
2. Through blood stream due to lowered resistance from trauma.
3. Through lymphatics. It has been

found by experiment that the organism travels along lymphatics in the sheath of the vas. Traumatism of the testicle or the posterior urethra is responsible for many cases. An acute attack may be brought on by strain or by dissipation, especially in the supposedly cured cases of gonorrhea.

This treatment in so far as I have obtained results is with mumps and Neisserian infection. I used sodium iodide in two cases of orchitis complicating mumps.

Case I. Reported for treatment with acute orchitis with mumps. Given two doses sodium iodide intravenously at forty-eight hour intervals. Within a few hours after first dose there was cessation of pain. Second dose given on account of great amount of induration. Reported three weeks later with an apparently normal testicle and said that he thought the shot helped his mumps.

Case II. Reported with mumps and an enormously enlarged testicle. Had been treated expectantly for a week with no decrease in pain or swelling. Had temperature, and was suffering very greatly. Was given three doses of sodium iodide at forty-eight hour intervals. At time of second injection was comfortable; no fever. No change in swelling so gave third dose two days later. Reported three weeks later with no swelling. Apparently no ill effect. Had been ten days at day labor.

Case III. H. S. Colored, age 16, farm laborer. Acute Neisser infection for week; acute swelling of testicle for three days; testicle size of orange, very painful; fever; severe pain along cord. Thirty-one grains sodium iodide intravenously at forty-eight hour intervals. Was relieved after second dose. Swelling much less after fourth dose. Reported later complete recovery with no further treatment.

Case IV. A. M. Colored, age 24. Railroad laborer. Urethral smear positive for gonococci. Left testicle very hard and painful. My usual dose of sodium iodide given every forty-eight hours, with relief after first dose. Seen at end of two weeks with apparent complete recovery and allowed back to work two weeks after last dose.

Case V. B. W. Age 55. Farm laborer. Denies ever having venereal infection. Urethral smears negative all the way through. Wassermann negative. Reported with both testicles badly swollen; very painful, some fever, very tender to touch. Reported May 9, 1929. Administered thirty-one grains sodium iodide intravenously on the 9th, 11th, and 16th. Had a severe reaction from second dose. Says had high fever, salty taste in mouth, ached all over, head felt heavy, etc.; none after third dose. Thirty days later reported with still marked swelling, no tenderness or discomfort save size of testicles. Has done some work for ten days. Reported again four months later with very little if any enlargement of either testicle and had been doing usual farm work since last re-

port for inspection. I thought that possibly I had a malignant condition here but he seems to have cleared up completely. We will still keep him under observation.

Case VI. J. C. Colored, tractor driver. Showed up with marked unilateral enlarged, very tender, testicle of seven days duration. Positive Neisser smear. Administered three doses sodium iodide and was perfectly comfortable after twenty-four hours.

Case VII. E. W. Colored, farmer. Came in with history of having had clap six weeks previously which only discharged for a week. Lifted a basket of corn a week before came to me and was given expectant treatment for that week, with pain and swelling getting worse daily. Gave usual dose of sodium iodide and when he reported for second dose, claimed that he had his first night's rest after the first dose. Was given four doses and at time of last dose was apparently well and reported later that he had had no more trouble.

As to general treatment, we advise rest in bed and use cold or heat, depending on relief of individual patient. If seen early, the cold seems to give more relief but later we find that heat gives better relief to patient. As stated before, practically all of my cases were seen late, from three to ten days after onset of the disease, and in all these cases heat was used. Laxatives and some preparation for the urinary tract are given. For two years I have been using the stock preparation, elixir saw palmetto and rental compound, which seems to do as well as any others. We immediately stop all local treatment in gonorrheal infections and use a good grade of suspensory. I have tried strapping but had to take them off too early, so am now using only the suspensory.

These reported cases have all been able to come to office for all treatment with the exception of three who had their first doses at home and came for the others.

We have used milk injections, expectant treatment and Neisserian sero-bacterin and since beginning to use sodium iodide we have been able to cut the disability time from one-half to two-thirds, and, as all of my patients need to make days, I shall continue using sodium iodide intravenously.

I am indebted to the following authors for articles: Chalmers, Eric Stone, H. King Wade, P. A. Rodrigues, David Guiringer, Jorge Cam-puzano, and Hugh H. Young.

PRACTICAL SCREENING TECHNIQUE

By

C. P. COOGLE, M.D.,

Director, Leflore County Health Department,
Greenwood, Miss.

Pursuant to the instructions of our beloved chief, Dr. C. C. Applewhite, I have prepared this paper in part from data accumulated during my investigational studies of screens as an

anti-malarial measure.

First, it is fitting that I should say that it has been demonstrated that screens are practical, economical and applicable for use by families living in rural sections of the malarial belt.

Without indulging in fantastic speculations as to the value of screens, I should like to say that money values are not the highest values in estimating the real gain to a family who lives in a well-screened home.

It is very likely worth while saying, that the main reason we health officers are interested in screens is that we must comply with the insistent demands of the public for malaria control, and the proper use of screens is the best measure we have to offer at this time.

It must be remembered that screens have been in use for more than a half century, although chiefly among "well to do" people.

Prior to the time LePrince insisted upon a study of screens as a practical anti-malaria measure, many of us were of the opinion that screens were only a rich man's luxury. Today, I for one am convinced that adequate screening should be on the home of every family living within the malaria region.

This is a most fitting occasion on which to recall that the subject of malaria, its effects, losses caused by it, and its control, has occupied one of the most prominent places on our public health programs during every health officer's conference for the past few years. In this connection, we are reminded of what Mark Twain said about the weather: "Everybody talks about the weather, but nobody seems to do anything about it." (We have talked about controlling malaria, but nobody seems to have done anything much about it.)

I presume I fell as all other health officers whose sincere public health efforts are matched only by their public health pride, and who faithfully endeavor to obtain a general idea of the major health problems of their counties. To realize the importance of permanent control measures for the eradication of contagious diseases is one thing. To put them into effect is another.

A health officer cannot afford to be unmindful of the common thought that is continuously in the minds of his people: "What are we getting for our money?" A consistent, successful health department is one that is well balanced, handling all emergencies and conducting a well rounded and standard routine public health program, and in addition, makes an effort to conduct a campaign against the major health problems. It is my opinion that nothing better illustrates the fact that a health department is successful, and that the people are interested in, and are behind public health work, than the fact that annual appropriations are made without a fight or the necessity of

"pulling strings." I trust I will be pardoned for saying that in my county, our budget has been increased each year from \$1,000 to \$5,000 above the estimates submitted by me. In other words, our county officials are willing to buy more public health.

Malaria is the major problem in Leflore County, therefore, considerable efforts have been centered on malaria control measures. Our people are pleased with the results of screens. They want more screens. They are going to have more malaria control whether the health department guides them or not, and it is up to me to see that they are not misguided.

I say in all candor to the health officers of the Delta region of Mississippi, I know positively how sincerely the majority of the governing bodies want malaria control. It would not be surprising to me to learn that there are thousands of dollars that could be secured for malaria control work, should health officers exert themselves to win the confidence of the governing boards, and devise a scheme whereby malaria could be attacked in a systematic and equitable manner.

It is my pleasure and privilege to review for you the practical screening technique developed in Leflore County.

1. PURPOSE OF SCREENS.

The purpose of screening is to place a barrier over windows and doors in such a manner as to keep out mosquitoes and other insects and at the same time not materially inconvenience the inhabitants of the home.

Screens are a means by which people may protect themselves from the bites of mosquitoes during the evening hours and during the time they are sleeping.

Screens are the cheapest and most effective anti-malaria measure that any health department can at present offer to its people.

In Mississippi, as well as many other states, there is a law compelling all food vending establishments to be screened in order to keep out flies and other insects and thus prevent their carrying germs to, and depositing their excreta on foodstuffs.

All sanitary inspectors should be well trained in the proper methods of screening both homes and public store buildings. Health officers and sanitary inspectors should be prepared to give advice to all who seek information relative to screens.

While in many respects there is a similarity between screening public store buildings and screening homes, screens on stores are primarily to keep out flies and to protect foodstuffs, whereas, screens on homes are primarily to keep out mosquitoes and thus protect the inhabitants from malaria. Screens on stores require more heavy construction because of the more constant abuse they are subjected to, whereas screens on homes may be of lighter

construction, but must be kept tightly closed because of the persistent efforts of mosquitoes to enter houses through even very small openings.

Unless screens are properly cared for one cannot expect the best results; therefore, the maintenance of screens is an important factor to both store and home.

2. PLACES TO SCREEN.

In this discussion we speak only of homes.

The ultimate aim of a health department is to see that all homes are adequately screened, but, since they cannot all be screened at one time, where shall we begin and what is the first thing to do?

a. Visit a large number of planters and land owners and discuss the merits of screens. Explain the average cost of screening tenant houses and tell the planters what has been done in the way of reducing malaria in places where adequate screens are used.

b. Determine from these interviews, which of the planters are sufficiently interested to give assistance in getting at least one house on a plantation adequately screened. The more screening done in each locality, the easier the work is made for the field worker.

c. A health department is never justified in devoting time to screening unless an educational feature accompanies the screening. The inhabitants of a house should know why that house is being screened, and how they should care for the screens in order to derive the best benefits from them.

d. Planters, land owners and managers are the ones to first make disciples of.

e. It is really more important that the doors and windows at the rear of a house receive more attention than those at the front of the house. The reasons are chiefly, that most people are more careless about the rear of their homes, and odors of foodstuffs attract more insects to the rear of the house. Pride causes most people to take better care of the front of their homes, including screens.

f. When possible, verandas should be screened as well as windows and doors. In many cases the expense of screening verandas cannot be borne at the time of the initial screening; therefore only doors and windows can be screened.

3. TECHNIQUE OF SCREENING.

a. House diagrams.

A small diagram of each house to be screened should be drawn on a standard sheet of paper (8x10 inches), showing the shape of the house, the number of rooms and their respective relationship to each other; the number and size of the windows and doors in each room, and the relative position of each door to the house. Additional data should be recorded on this house diagram, that is, the name of the plantation; name of tenant; number in the family; number in the family under 15 years of

age; name of inspector. Each house diagram should be numbered for identification and, when practical, kept in a loose-leaf binder.

b. Accuracy in taking measurements, and carefulness in recording all measurements are essential in preventing unnecessary mistakes and loss of time and materials.

c. An identification tag is made for each screen door. These tags are approximately 2x4 inches in size and contain the following information: Name of plantation, name of tenant, name of shipping point or address, house number. Door, as: front, rear, right or left side of house; height of door in feet and inches; width of door in feet and inches.

d. Window measurements.

Window measurements are made to allow a 1-inch lap on each side of the window, a 1-inch lap at the top and a 2-inch lap at the bottom. Should the supply of wire screen not be of the exact width required, it is better to use a wider lap, as the selvedge should not be cut in order to confine the lap to one inch.

e. Door measurements.

Practically all screen doors should be made to hang on the outside of the door facing. This outside fit is more serviceable than an inside fit, and it is less likely to become troublesome. Houses that are poorly constructed very often sag. It is a well established fact that to be effective, screen doors must fit properly, therefore the house sagging does not materially affect a screen door that is properly hung on the outside. (Outside fit.)

A screen door should be at least two inches wider and one inch higher than the regular door opening. This allows a one-inch lap on each side of the door opening, and a one-inch lap at the top. In cases where the houses have sagged to such a degree that the regular doors are not exactly vertical, additional allowance should be made so that the screen doors can be hung so as to completely cover the door opening.

When screening verandas, an estimate should be made to include the entire square feet space to be covered, with a sufficient allowance for a lap at the top, bottom and sides. The strips of wire screen should be placed in a vertical position, with cross bars spaced every three or four feet.

Windows.

The exact size of wire screen desired for the respective windows is ascertained from the house diagram. Wire screen should be cut into strips that will cover the window opening and as nearly according to measurements as the material will allow. Place the strip of wire screen over the window opening and begin tacking at the top, from center to right then from center to left, spacing the tacks two inches apart. Begin at the top and tack the sides, also spacing the tacks every two inches. After the sides have been fastened, begin in the center at the

bottom and place two rows of tacks across the bottom, each tack spaced two inches apart.

Doors.

Screen doors are hinged to a strip called a hanging strip. This hanging strip should be one inch thick and 3 inches wide, and approximately one-half inch longer than the screen door. When the screen door is properly hinged to the hanging strip there will be a one-fourth inch space at the top and at the bottom of the door. The hinges should be spaced twelve inches from the top and 12 inches from the bottom of the door. This hanging strip is firmly fixed to the door facing by five 8d nails. Encasing strips, one inch by one inch are used to surround the door and form a tightly-fitting joint.

Number 5 Japan coil springs 14 inches long are serviceable.

Three-inch by three-inch butt hinges are practical. Two-inch door pulls. Two-inch hooks and eyes are sufficient.

A properly hung door is more important than a well made screen door.

Don't force a screen door by using extra spring tension.

Don't call a screen door properly hung if it hinge-binds. Trouble will follow.

Don't attempt to hang a screen door unless you have sufficient lumber and nails.

Don't drive the screws with a hammer. They will soon work loose.

Number 4 canvas tacks should always be used to fasten wire screen, windows and also around verandas.

Screen doors may be purchased in desired sizes, or they may be built in the county where they are to be used. Personally, I believe that a general screening plan will be hastened if the screen doors are built in the county and under the supervision of the health department. That question is of course open for discussion.

Certainly, for years to come, the health officer and sanitary inspector will be expected to be the chief salesman for screening in every county.

Each health officer will probably develop his own method of creating a market for screens in his county. He may choose either bought or home-made screen doors, or he may combine the two methods from time to time.

Adequate screening is only one part of mosquito proofing. Papering the interior of houses is important, and in many instances is necessary. Cotton sample paper is best to use for that purpose. After a thorough demonstration, most tenants can do as well as anybody in applying this paper to their houses. The big problem is assistance in getting the paper to them.

This papering scheme has proven very popular in every place where it has been introduced. It is a wonderful leader for screens and

other sanitary measures.

All health departments should assist in the work, and in securing materials for at least three years, to get screens on a solid foundation. This expenditure should be charged to education and malaria control. It will be well spent and will eventually bring big returns to a county.

OUR DEBT TO MEDICINE OF YESTERDAY: OUR OBLIGATION FOR TOMORROW

By

B. S. WALLER, M.D.,
President Tri-County Medical Society,
Silver Creek, Miss.

Mr. Chairman and Fellows of the Tri-County Medical Society:

Permit me to express my sincere appreciation for the honor you have bestowed upon me by having elected me president of this society for this past year. I want to express my appreciation to our very efficient Secretary, Dr. Markette, whose untiring efforts have accomplished whatever has been done.

In selecting a subject for this occasion, I have chosen one that is already common knowledge to you gentlemen: "Our Debt to Medicine of Yesterday; Our Obligation for Tomorrow."

The practice of medicine is probably the oldest profession in the world. Our earliest definite information comes from Egypt 3000 years B. C. - Scientific medicine began with Hypocrates about 460 B. C. The Hypocratic Oath has a real value to modern medicine. We have not the time nor the desire to trace medicine through the nineteenth century, but when two important problems of disease, cellular pathology, developed by Virchow; and its cause, which Pasteur demonstrated was due to microbic activity, the real science of medicine began.

All through the ages the faithful men of medicine have stood for education, culture and refinement. The title, Doctor, means a teacher, and the physician who excels is performing the task of a teacher every day.

The progress of the world, in every department of human endeavor, seems in this generation to have received a wonderful stimulus and many amazing things have been accomplished; but human nature is so constituted that the miracles of yesterday are regarded as commonplace today; and so the progress of medicine and surgery is accepted as a matter of fact and but little thought is given to the men who devoted their time and often sacrificed their lives in an effort to serve their fellow man and make the world a safer place in which to live.

Many of the discoveries of medicine read like fiction. When the microscope first enabled us to comprehend the fundamental cellular

structure of the body, the key to the ultimate interpretation of life was put into our hands. When Pasteur discovered the existence of cellular organisms capable of attack on human cells, he gave to our science its first knowledge of the cause and nature of disease. The science of Bacteriology was then born. Through it. Pathology found a new interpretation and became a vital study. The culture tube and the reagent brought chemistry into the field and through the three, the laboratory became the center of medical investigation. Short though the time has been since the birth of these sciences, their contribution to human welfare has been of untold value.

The knowledge of the prevention of disease has saved to the world innumerable lives and from a monetary standpoint, is beyond computation. Cholera, which invaded the nations of the earth, has become only a name. We can not compute the number of children whose lives have been saved from diphtheria by the use of antitoxin and better still, those immunized from this terrible disease by toxin-antitoxin, to say nothing of the grief and anguish lifted from the hearts of the parents of the world. Smallpox, another horrible disease, through vaccination, will soon be gone. Typhoid fever, years ago claimed its thousands of citizens of the nations. Today, through modern sanitation and preventive inoculation, it is fast disappearing and its existence will soon become a disgrace to a community and to an army a crime.

We are indebted to the physicians, especially to Drs. Reed, Gorgas and their helpers, for discovering the cause and stamping yellow fever from the face of the earth. One afternoon when Dr. Gorgas walked into the dissecting room at one of the government hospitals in the Canal Zone, where a number of surgeons were at work on a cadaver, who had died of yellow fever, he said: "Take a good look at this fellow, boys, for it is the last case of yellow fever you will ever see." This statement, though doubted then, has become true and Dr. Gorgas is known as the "World physician." As a result of this discovery, the United States was able to build the Panama canal, converting this land of pestilence into one of the healthiest spot on the earth, while the canal has re-routed the commerce of the world.

Our predecessors, the men of yesterday, wrought well. Let us endeavor to emulate their example by carrying on in a manner commensurate with their accomplishments. Any medical organization that is just marking time today is retrogressive. Altruism, in America, while not in a flourishing condition, is far from being extinct. We know that it is one of the basic fundamentals on which the medical profession is founded, and I hope it will continue to ramify through medical practice, softening and blessing its administration to mankind.

Inspired with such a heritage, we should

face tomorrow with confidence and determination to do our duty. This is a different age, less romantic, but filled with problems to be solved. The pioneer faced uncharted fields along untrodden paths; these men surmounted every hardship and left the way fairly well blazed. Progress must be our slogan.

The doctor of today faces tomorrow a different man from the one who entered medicine fifty years ago. Then, his equipment was meager; his only resources were his faculties of deduction derived from his own experiences. Today, he must be better educated and aided by the knowledge of yesterday, with the resources that science gives, his responsibility as well as his opportunities are increased. He must resort to the laboratory and the hospital. Along with better education of the physician, the people have been enlightened and expect a new standard.

The family physician has ever been the bulwark of medicine. His has been the labor of love and a superb endeavor to combat disease; and confronted with the most desperate conditions he has with rare resourcefulness risen to his responsibilities. The intrepidity of the country doctor in the management of the emergencies of accident and disease, the perils of childbirth and the mastery of conditions under the most adverse circumstances is marvelous. His calling exacts the utmost that man can give: knowledge, a steadfast hand, exquisite judgment and skill, to be put forth not at any self-chosen moment, but daily for the need of humanity. He has to know how to guild the gloom of affliction's couch with the silver lining of hope. Yet, the war tramp, the muffled drum, the measured tread of armed men and the musket shot peeling over the grave, honor the death of the soldier, but the physician, who meets his death battling for truth, passes to an inconspicuous grave, unhonored and mourned only by a few who knew his worth.

Medical science has advanced so rapidly that it has to be rewritten every twenty years, hence we find ourselves trying to forget those things we once knew. G. K. Dickerson once said: "Should Henry Ward Beecher come back to his pulpit, he would find his preaching just as understandable and effective as in his day; should Chief Justice Marshall return to his bench, he would find the law unchanged and his decisions acceptable. But should the most competent physician and surgeon of fifty years ago return, he would be at a loss, for he would be obliged to study medicine over again and the surgeon would not be able to do the ordinary work required in the operating room."

The medical student of a decade ago was not taught preventive medicine. We expected to cure the sick. We studied physiology, pathology and therapeutics. Our faith was in drugs. Now we know if people are to live longer and better, fewer drugs, better sanitation, fresh air, sunshine and diet must be our slogan. We must

teach these truths and stress the fact that health is no longer a game of chance. Retaining the benefits of these innovations and making further progress against disease depends alike upon the dissemination of knowledge concerning sound scientific preventive medicine.

Our obligation for tomorrow, hinges around prevention of disease. The rural doctors are getting scarce. In my county in 1915 we had twenty practicing physicians and today we have five regular, active practitioners. We must teach people in the clearest manner possible, the fundamentals underlying health and disease; methods of preventing sickness and the necessity of periodic health examinations. The degenerative conditions of the great vital organs, the heart, the kidneys, the liver and brain, might be detected while remedial measures might be effective. Through the prevention of infant mortality, the span of life has been very materially lengthened during the past decade. There has been wonderful progress made in preventive medicine in recent years. This was demonstrated in the efficiency of the American army during the World War. Community health, however, is getting in advance of the prevention of illness in the individual. Too little attention is paid to those who are apparently in good health. Many people are shocked, while resting securely in the supposed enjoyment of good health, to find that an examination for life insurance revealed some unsuspected disease, that could and should have been easily detected long ago when a cure, or at least a prolongation of life could have been attained. Eternal vigilance, through the physician, is the price of lengthened life, especially in the middle ages. We are facing today an increase in cancer, kidney and heart disease. I am convinced that the physical basis for much of our inefficiency as well as illness and death from diseases of adult life, comes from malnutrition or from overeating. The properly nourished individual rarely develops tuberculosis, pellagra or other similar diseases. The well-nourished individual is less susceptible to the acute infectious diseases like influenza, pneumonia and many others. When people understand the known facts regarding diet and nutrition and live accordingly, many of the health problems will be solved. There will be a remarkable reduction in the germ diseases, and chronic digestive troubles, as the heart, blood vessels and the kidneys. Three classes of eaters are found: the over-eater, the under-eater, and the rational eater. The latter has a far better chance of attaining old age than the other two. If the adults of today will put into practice knowledge of food and vitamin values that are available to them and teach their children the same, years could be added to the lives of the coming generation.

Nutrition has largely been responsible for bringing tuberculosis from first to fifth place in the cause of death in the United States. Who

among us can realize what this has meant in bettering the condition of the American people? This accounts largely for our unprecedented prosperity and a standard of life unequaled by that of any other country. Disease has been the greatest single factor in producing poverty and misery the world over. Prevention, is my idea in writing this paper. Another problem of vast importance economically and socially confronts us in the care and prevention of mental diseases. Progress in handling these diseases lies in the general diffusion of psychiatric knowledge among the general profession, so that the patient may receive treatment months and years earlier than they do now. This leads us to consider the pre-psychotic and early psychotic periods. These tendencies can be observed in some cases even before the school age. These phobias, neuroses and psychoses of childhood are going unnoticed and with no concern. If a survey of our school children were made a larger number would be classed as nervous and excitable. The moron often could be recognized before the period of delinquency. The psychiatric studies of school children would prevent many of the nervous, unstable children from becoming the neurotic adults of tomorrow. We are confronted with the question: How can this group of morons, feeble minded, mentally unfit, be prevented from propagating their kind into the coming generation. Our daughters are not only not being educated in such a way as to become good mothers, but are being educated not to become mothers at all. If this continues, the bulk of the future generation must come from the feeble minded element of the race, who propagate rapidly. More of the hospital beds of the country are occupied now by individuals suffering from some mental condition. A large per cent of inmates of our penal institutions are mental derelicts. The individual, family and state loss from this class of citizens can hardly be estimated. They require institution and hospital care; they are incapacitated just as much as if they were sick with some physical disease. Our obligation lies in trying to prevent the increase of this class of citizens. As physicians, we should stress the necessity of sterilization of the low grade moron and mentally unfit.

Some one has said:

"You talk of your breed of cattle,
And plan for the higher strain;
You double the food of the pasture
And heap up the measure of grain.
You draw on the wits of the nation,
To better the barn and pen;
But what are you doing, my brothers,
To better the breed of men?"

Medical students should receive a more thorough course of instruction in psychiatry in our medical schools, looking to the institution of some overdue reforms in handling and treating this class. I believe the full-time health unit,

stressed by our efficient State Board of Health, could be made to function along this line, the doctor in charge of the unit having received at least a working knowledge of psychiatrics, could detect the sub-mental school child, the border line cases of insanity, melancholics and others needing treatment, especially the poorer class who, usually are denied treatment in the early and hopeful age. This health unit might be responsible for supervising discharged patients from insane hospitals, help them to find employment and advise them when difficulties, domestic, financial and otherwise, confront them. I am persuaded that this would lessen the number of suicides that has of late claimed a large class of our good citizens.

The present method of handling the mentally unbalanced patient is deplorable; jails and asylums full, and to reach the latter institution, these mentally sick people have only one route: police station, sheriff, jail, court. He is branded "crazy" and committed to the asylum. By the time he reaches this institution, he is superstitious, non co-operative and rebellious. The institutional physician is burdened with three times as many as he should have under his care. He gives a hurried examination, his conduct noted and he is left largely to associate with the chronic insane; he loses hope and interest.

Let us cherish the hope that Mississippi will soon have a new, modern hospital where the unfortunates can receive modern and effective treatment, which they will get under the present efficient management in this new home. The physician must still play the role of teacher.

Here is our challenge and our goal; a prediction made by a French philosopher, Descartes, in the seventeenth century:

"If ever the human race is raised to its highest practical level, intellectually, morally and physically, the science of medicine will perform that service."

THE RELATION OF ORGANIZED MEDICINE TO THE PHYSICIAN AND HIS OBLIGATION TO IT

By

HUGH GAMBLE, M.D.,
Greenville, Miss.

(President Mississippi State Medical Association)

Naturally when elected President of the State Medical Association, the first question that presented itself was, in what way could I be most useful to the medical profession of the state.

The first thought was to increase the membership of the Association. Upon reflection, however, one is compelled to realize that an augmented membership obtained through intensive drives would not be of any appreciable value to the physicians individually, nor I doubt

to the Association as a whole unless it was achieved by a realization by the profession of the benefits of organized medicine. I felt, therefore, that one of the most important things that could be done is to attempt to bring before the profession of our state the advantages to it of a thoroughly organized medical profession, particularly is this the case in that at the present time many changes of an economic nature are taking place, and the field of medicine is being encroached upon from all sides.

Organized medicine in this country presupposes units, made up first of the county medical societies, second of state associations composed of the county societies, and third, of the American Medical Association made up of the various state associations. The unit of this whole vast superstructure is the county medical society. It is the cornerstone upon which rests the whole superstructure of American medicine today.

The second article of the constitution and by-laws of our state association reads as follows: "The purpose of this association shall be to federate and bring into one compact organization the entire medical profession of the State of Mississippi, and to unite with similar associations with a view to the extension of medical knowledge, and to the advancement of medical science, by the elevation of the standards of medical education and to the enactment and enforcement of just medical laws, to the promotion of friendly intercourse between physicians, and to guarding and fostering their opinion in regard to the great problems of state medicine, so that the profession shall become more honorable and capable within itself, and more useful to the public in the prevention and cure of disease, and the prolonging of and adding comfort to life."

With paraphrasing of only a few words, this can apply equally as well to the county medical society. In fact it would be well if the by-laws of all county medical societies were based upon or copied from those of our state association.

Do we measure up to this standard? If not, in what do we fall short and in what manner can it be remedied? I am afraid that most of us have not accorded to our local medical society the importance which it deserves. We have been content to allow the program to be arranged, attend the meeting and then feel that we have fulfilled all our obligations. We have hardly begun. It is an age of flux and changes, habits of life are being altered. Medical viewpoints are changing, the laity are being instructed by others than doctors in medical matters. Lay associations are taking over in every community work of a pure medical character, while we stand idly by. Our prerogatives are being usurped. It is only by efficient organization that we can maintain the high status in the community to which medicine is entitled, and we have in the properly functioning medical

society a ready means for the maintenance of this high standard.

At the present time efforts are being made all over our land to undermine the principles and ethics underlying the profession of medicine. There is a great deal of propaganda as to the high cost of medical service. Commissions have been appointed to make nation-wide investigation. Public health institutes have been organized purely for profit and have been foisted upon the public by wide advertising and specious pleas as to their character and object toward the improvement of health conditions. Most of these are found in their final analysis to be purely commercial in character.

I doubt if it is even considered that medicine is the one calling or profession in which charges have remained practically stationary for the past thirty years. Other costs have increased by leaps and bounds, but the doctor has continued to be content with his modest stipend. No credit has been given the profession for the services which have been rendered the public gratuitously. I feel safe in saying that not more than one in ten of the practicing physicians collect for more than 75% of their work. Not many businesses would countenance 25% of non-collectible debts. Nor do these propagandists take into consideration the intimate knowledge which the intelligent family physician has of the personal history, habits, idiosyncrasies, etc. of his patients, facts which are of incalculable value in their treatment when ill.

On the physician's side we must admit, that oftentimes the study of medicine begins when he enters medical school and ends when he receives his diploma.

A physician who does not keep abreast of the advances in his profession cannot hope to give his clientele the benefits of medical progress. There are other factors influencing the practice of medicine which are gradually solving themselves. For example, the large number of physicians who are locating in the cities and the smaller number in rural communities. In a sister state a recent survey of this condition showed that 68% of physicians of forty years of age or more were located in the larger cities and towns. The apparent inequality of this is largely due and has even been brought about by the advent of the automobile and good roads.

Certainly when one sees these various developments and problems confronting the medical profession, one wishes to find out how they can be best solved so as to be of most benefit to the profession and the public. We believe that our present form of medical organization, were it to be completely organized, would meet all the indications.

During the interim since my selection to guide the policies of our state association I have studied closely our organization, and have inquired closely into the *modus operandi* of those

associations that are outstanding, and today it is my endeavor to bring to you the result of this investigation.

Not all of the measures found successful in Wisconsin or Indiana will be applicable to our needs, nor will those measures found of benefit in one of our county societies be adaptable to all of the county societies of the state. Each probably has some local need peculiar to itself, but it will be found that the main general principles enunciated in our constitution and by-laws will apply to each of us.

The county organization has an obligation through its constituent membership of the community in which it is located. Just as has the individual physician his obligation to his county society, and his civic obligations to the community, I am convinced that it is through the enlivening and building up of the local society that these various problems will be ultimately solved. The obligation to the community of the local medical society is largely discharged when it has fulfilled its obligations to its constituent membership by advancing the scientific phase of their medical work. In doing this the community certainly shares in the benefits to be derived from a physician who is daily increasing his knowledge along scientific lines, and keeping abreast of all medical advances.

In order that the meetings of the local medical society shall be of most benefit to the profession it is essential that these meetings be of such interest as to arouse and maintain the enthusiasm of the constituent membership. As anyone who has ever been closely associated with a medical society can testify, there are many factors which enter into this feature. Listing them in their relative importance I would say first comes the secretary. A live secretary is most important, I might say necessary, for the successful functioning of his society.

The Wisconsin State Medical Society has probably the most successful county societies of any state association with which I am acquainted. Secretaries of all county societies have been preferably young men, active in their profession and anxious for the advancement of scientific medicine. It has been found advisable with them to have a yearly meeting or council of the county secretaries from which comes great good toward the successful functioning of all county societies. I might also state that the Wisconsin State Medical Society has an all-time secretary who devotes much of his energy to the development of the various local societies. Upon the secretary largely depends the active co-operation of the members. He should be a wide-awake, active man, imbued with the importance of organized medicine, and the fact of its influence upon the profession and the public. Keeping to the forefront the various problems that locally are of interest to organized medicine in the arrangement of the program. This feature plays a most important part in the enlisting of the co-operation of the

constituent members of the society. Some associations import most of the speakers for these occasions. This, in our opinion, is of doubtful value when persisted in as a constant practice. We believe that most of our societies have a constituent membership such that given the opportunity and encouragement, they would develop into men who could present good papers along medical and scientific lines of medicine; also capable of entering into valuable discussion elicited by other papers brought before the meeting. It has been our observation that when outside men present these papers, particularly men who have been trained in public speaking and teaching, there is very little discussion forthcoming. The development of local men, making them better students, better speakers and better practitioners of their profession, is naturally one of the most important functions of the local society, and redounds not only to the credit of the profession, but to the good of the community.

The program should be well balanced, the topic preferably one that elicits the immediate interest of the audience. We have yet to see any practical paper, dealing with a practical subject in a practical way, that did not at once arouse the active interest of the audience.

The success of the local society depends to a certain extent upon its size. I know originally in our home society in Washington County we had a comparatively small membership. Our programs were never attractive, attendance was small. We met as it were to keep alive. In combining with the adjoining counties to form a larged association, we have had a real live medical society, one which has been of great benefit to all of its constituent membership. In our minds, we are convinced that the local society would have at least a membership of possibly thirty to thirty-five members.

Since the standardization of hospitals there is no question but that staff meetings have to a certain extent encroached upon the work of the local society. This is not as it should be. The staff meeting is an individual problem connected with the hospital and the meetings of the local society can ultimately be worked out so that they can be mutually beneficial rather than antagonistic in their character. This is a local problem which each society will have to solve for itself, keeping in mind at all times the importance of organized medicine.

Amongst physicians the medical society should take pre-eminence over all all other organizations. When this is done, with active, capable and sincere men at its head, directing the trend of its work, the physician will then continue to maintain the high position in civic organizations to which he is entitled, and the society itself will make its influence felt in all affairs of a medical nature.

In a large measure I have devoted my time to the functions of the local society. I believe that the medical society can reach the problems

which I have mentioned by close organization, the maintenance of high ideals in the practice of medicine, measures toward the constant elevation of the scientific side of medical practice, and the enlisting of the active co-operation of the whole of the medical profession who are eligible to membership in its organization.

The individual physician when he surveys the field of medicine as it exists today should fully realize his obligations to his local medical society and organized medicine as a whole. The physician's standing in the community today is as high as it ever was. In time of trouble he is appealed to, looked up to, and his counsel is followed. We believe, however, that his influence in the community can be increased by his adherence to his local medical society, and in turn there is no question but that the standing of the local medical society, so far as the public is concerned can be raised by having its members serving in civic positions, on school boards and in public organizations of various kinds. In these manifold ways we believe that the local medical society and the constituent membership can by their handling of problems confronting organized medicine today, be the means of educating the public, and mold public opinion so that there will never be the necessity for a letting down of one iota of our ethics, nor for the commercialization of medicine in any of its phases.

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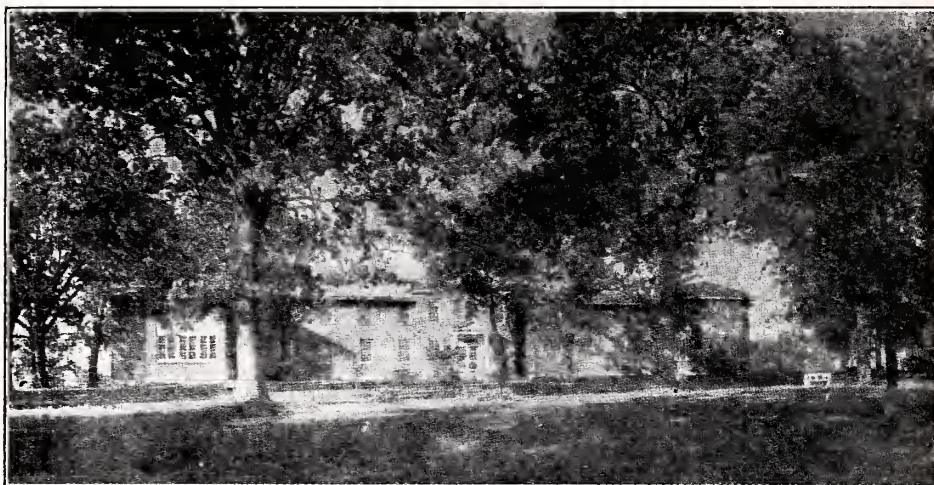
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THE PASSING OF THE BOYS IN GRAY

By MISS BESSIE BARTLETT

Booneville, Miss.

Music fills the air, and the crowd gives 'way
For the long line we see is the boys in gray;
With steady step and heads held high,
They march through the throng, and as each passes by
He is thinking of comrades who marched by his side,
Who fought bravely in battle and bravely died
For the sake of his country and loved ones so dear,
And their faces brighten, as cheer after cheer
Goes up from the crowd as they march that way,
For we love to see "The Passing of the Boys in Gray."

Years pass by and we watch again
A line of gray, as we watched it then;
The music is gay, but their step is slow,
And many passed from the ranks long ago;
But their faces brighten and we see once more
Their hearts are brave as in days of yore.
We watch these boys as we watched them then,
For some will not march this way again;
With sadness we see them part today,
For this is "The Passing of the Boys in Gray."

Many years have passed and we see today
A few soldiers left who were the boys in gray;
They are bent with age, and their step is slow
And they cannot march as of long ago,
But we can love and honor them while they live,
For all they had they did freely give
For the sake of their country and loved ones, too,
But their battles are over, and their days are few,
And with sad hearts we see them again today,
For this is the last "Passing of the Boys in Gray."

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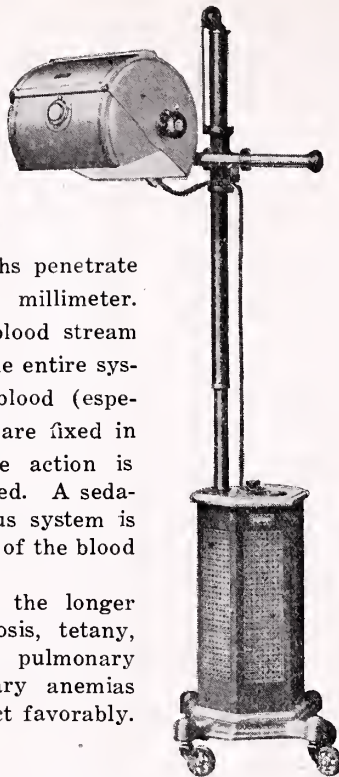
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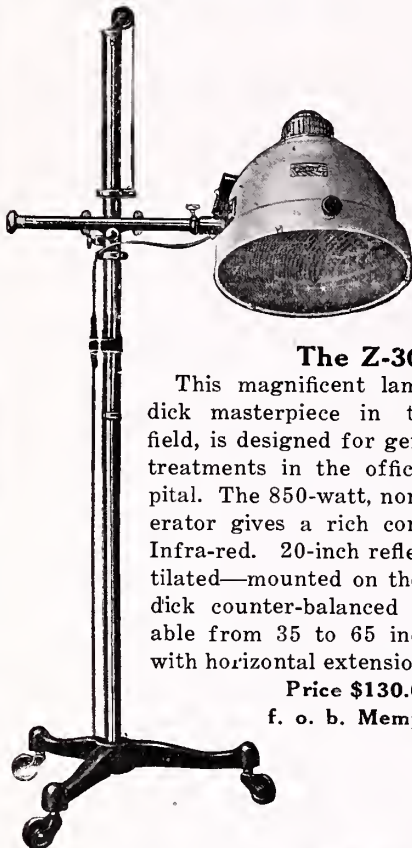
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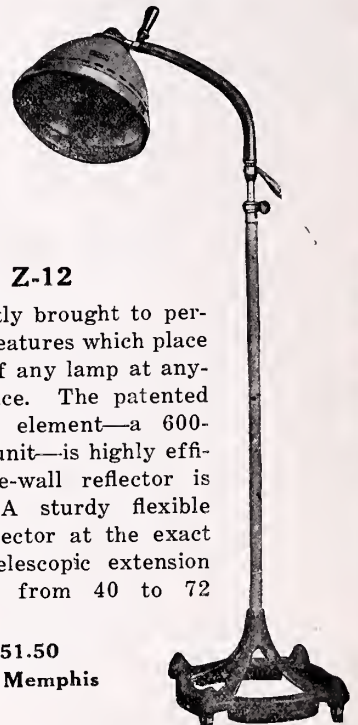
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Be sure to make your plans to attend the state medical meeting which convenes in Vicksburg May 15th. Vicksburg is one of the leading medical centers of Mississippi. It is well supplied with hospitals, able and progressive physicians and surgeons. The doctors of Vicksburg know how to entertain as but few do. Let us show our appreciation by a full attendance.

Book-Sansum's Third Revised Edition of The Normal Diet is just off the press. It is published by The C. V. Mosby Company. This book covers in a wonderfully able and sensible manner the principles of diet. It is written so that it may be well understood by the patient. It is most helpful for the physician. Dr. Sansum shows the relation of food, the different varieties, to constipation, to acidosis and other digestive disturbances. He also discusses the caloric requirements and the importance of water in the body economics. It is hard to find a book so easily comprehended which deals with so many fundamentals in diet. He also gives some valuable information on the anatomy and physiology in a digestible form for physician or layman. The price of this book is only one fifty and it is published by The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, U. S. A.

Dr. Stephenson of Corinth comes along with a good paper as usual. This one, "Acute Rhinitis in Children," is of great importance. It is one that we have with us almost always.

On the twenty-fourth of June there will be a meeting of the American Editors and Authors' Association held in Detroit. Subjects of great importance to the profession and the general public will be discussed.

Dr. McGahey of Calhoun City comes along with a fine paper on pyelitis. This is his first appearance before this society as far as we know, which goes to show that we have plenty of good material who have not been writing papers.

A doctor says there is no special virtue in early rising. Almost anybody would have faith in a doctor like that.—Punch.

On June the 10th the Southern Railway Surgeons will hold their annual session in Chattanooga. This is the home of the Newells and it goes without saying that the surgeons will be well cared for up there. Chief Surgeon Applegate was formerly from this city also, and we believe he has been in the service for about twenty-five years. He is an able chief and a big hearted man.

It was a great pleasure and a distinct profit for us to have with us at our last meeting Dr. Chapman of the Gorgas Hotel-Hospital of Birmingham. He is a most delightful gentleman and he read one of the most instructive and able papers we have had in our society.

We are delighted to have a paper from Dr. Joseph H. Graves of Houston, Texas. Dr. Charlie Dick Berry interested Dr. Graves in writing this paper for us. He no doubt felt a kindly interest in his friends back here who are still wearing hats. This is a fine paper, true or untrue, has good reasoning. We thank Dr. Graves for it. We want to ask that Dr. Berry pay us a visit and bring Dr. Graves along with him and we shall meet him with heads uncovered.

BOOKS

When Dr. William David Sansum speaks something is said well worth your time. His book recently published by Harper and Brothers, New York and London, on Diabetes Mellitus is certainly full of the meat in the cocoanut for the general practitioner. It is good for the patient and the specialist, also. He knows how to cover the subject in a most efficient manner. He makes it clear and easy to understand, no superfluous words, but no important information left out. The book is divided into two main divisions: Medical section and Dietetic. If you are interested in diabetes you will surely appreciate this book. The price is so small compared with its value. HARPER & BROTHERS, Publishers, New York.

Like the poor, a large per cent of the people have hemorrhoids with them always. They have a hard time living with them and how to get rid of them without an operation excites the interest of all. Pruritis ani is one of the most stubborn and aggravating maladies anyone can possibly have. It is very stubborn to treat. F. A. Davis Company, Philadelphia, has just published a book by Dr. Lawrence Goldbacher on the treatment of hemorrhoids and pruritis ani. The book is well written and his results must be unusually good. This plan of treatment has many advantages. Dr. Goldbacher does not picture the injection treatment as being so easy, but he describes it so clearly that the average surgeon can follow it with safety and successfully, we feel sure. He classifies hemorrhoids as to cause and type and gives the technique of injection very minutely, listing and describing the instruments needed.

Difficulties strengthen the mind as well as labor does the body.—Seneca.

Economy is not the amount of money spent, but the wisdom used in spending it.—Henry Ford.

It is the man who does not express an opinion whose opinion I want.—Abraham Lincoln.

Doctor: "I hardly like to mention it, but that check you gave me has—er—come back."

Patient: "That's funny, doctor—so have all my symptoms."—London Opinion.

Misfortunes have their heroism and their glory.—Napoleon.

Dentist: "What kind of filling do you want in your tooth, son?"

Boy: "Chocolate, doctor."—Med. Life.

"Ouch! I bumped my crazy bone!"

"Oh, well, comb your hair right and the bump won't show."—Royal Arcanum Bulletin.

THE CONFEDERATE VETERANS REUNION

The United Confederate Veterans will hold their fortieth reunion on the Mississippi Gulf Coast June 3-6, 1930. The gray lines are thin and the step of the remaining few is tottery, but their hearts are strong with enthusiasm to meet on the hallowed ground of their chieftain. Mississippi is and should be proud that she furnished the presidency of the Confederacy, the great and the brilliant Jefferson Davis. Mississippi must do itself proud in entertainment of the boys who wore the gray and the peerless citizen in peace. The governor and the legislature appropriated liberally. The sons must acquit themselves as of their worthy sires.

The human heart, the human mind, the human soul were created to freedom. The lowly Nazarene was the champion of democracy. His coming rekindled the desire for liberty. The love of freedom activated the vision and steeled the determination that discovered a new world, America.

A southern man, Thomas Jefferson, with his gifted and prophetic pen, announced to the world the birth of the newly born Child of the ages. The Father of our country, a Virginian, liberated and defended it with his sword, and schooled it to manhood with his wise and projected statesmanship. Andrew Jackson, a rugged democrat of Tennessee, won national admiration in the struggle for freedom of the seas. General Gorgas of Alabama extended the hand of mercy to all nations with his efficient public health methods. A native of South Carolina, Woodrow Wilson, with his strong and determined arm of democracy stayed the march of the war gods and all but Divinely pointed to a world of peace. The Southern States have been the mecca, the nestor, and the promoter of democracy.

Sons of Confederate Veterans may justly feel proud of their ancestry. Their fathers were the bravest, the ablest, and the most resourceful in in war that history has yet recorded, and in peace the most courtly and the most magnanimous. The southern soldier fought for democratic principles, for property, and for fireside. Davis, Lee, and Jackson are still growing in international favor as is the private soldier. But in a large measure justice is yet to be appeased, deeds of valor are yet to be recorded, political prejudices are to be overcome, and economical

independence is to be more fully established. Sons of Confederate Veterans need to be about their important business. This year, we of Mississippi, can surely not do less than enroll in the organization of Sons of Confederate Veterans and attend the reunion, offer your greetings and and do your bit for the physical comfort of the men we love and honor.

I want to urge the sons of veterans of each county to get together and organize at once. If you do not have as many as ten in your county, then I would suggest that you enroll in the Harrisburg Camp No. 645. W. F. Riley, Sr., Commander, will gladly give you any information you desire.

(Signed) W. H. ANDERSON, M.D.,
Booneville, Miss.
Brigade Commander, 1st Miss. Division.
Assistant Surgeon-in-Chief.

Science, if it means anything at all beyond procuring us material comforts and serving the sensual side of our nature, has a great spiritual value, not in the sense of bolstering up our old prejudices or absurd ideas, but as gradually un- visible or invisible, in which our lives are played out and which, in wonderful ways, determines our actions.—Arthur Lynch, in *The Thinker*.

The bad man is the man who, no matter how good he has been, is beginning to deteriorate, to grow less good. The good man is the man who, no matter how unworthy he has been, is moving to become better—John Dewey, in *The Thinker*.

COURTESY

The reason people pass one door
To patronize another store,
Is not because the busier place
Has better gloves, or silk, or lace,
Or cheaper prices, but it lies
In pleasing words and smiling eyes.
The only difference, I believe,
Is in the treatment folk receive.

Facts are nothing, but the ideas they signify, the analogies that they evoke, are everything.—Jean Moreas.

LIFE'S TEST

If never a sorrow came to us, and never a care we knew;
If every hope we realized, and every dream came true;
If only joy were found on earth, and no one ever sighed,
And never a friend proved false to us, and never a loved one died,
And never a burden bore us down, soul-sick and weary, too—
We'd yearn for tests to prove our worth and tasks for us to do.

—Edgar A. Guest.

CARCINOMA OF THE STOMACH

By

J. P. CHAPMAN, M.D.,
Birmingham, Ala.

Of the 100,000 cancer deaths last year, 38,000 were from cancer of the stomach, and this disease is increasing at the rate of 2.5 per cent per annum. It is a deplorable fact that in most cases the disease is too far advanced when the diagnosis is made to offer any hope of a cure to the patient. We concur in the belief that carcinoma of the stomach is a curable disease, if recognized "early enough" for surgical eradication, but the greatest problem lies in getting the patient to present himself at the proper period and for the physician to make a thorough gastro-intestinal study when he consults the doctor.

The stomach is not subject to many diseases in itself. Excluding certain rare conditions as benign tumors, syphilis, etc., the only two important lesions that offend the stomach are carcinoma and ulcer. The incidence of organic diseases of the stomach in a large series of cases presenting gastric symptoms is only 14 per cent. Foster in 3000 cases found 14.5 per cent. In such diseases of the stomach, the ratio is usually ulcer of the stomach in 1; cancer of the stomach in 2; duodenal ulcer in 6. In a report of Dwyer, presenting a review of 3000 cases of digestive disorder, it was found that 3.6 per cent were cancer of the stomach, excluding a few rare conditions, according to Jordan's method at the Lahey clinic, (1) frankly ulcer, 2) frankly malignant, and 3) questionable ulcer of malignancy. It is in these borderline cases that particular care is required in the way of study and management if the patient is to be given the one chance if malignancy is present.

A review of thirty cases of carcinoma, coming to our clinic during the past few years is presented, not with a view of offering anything new, but simply to renew our interest in an apparently increasing malady that is very serious in every respect. The only outstanding advance in the study of cancer of the stomach during the past twenty-five years has been made through the domain of radiology. This study will include the early symptoms, a workable classification, consideration of malignant ulcers, and certain points in the diagnosis of cancer of the stomach.

INCIDENCE

In this small series, all of the patients were white, there being very few colored patients coming to our clinic; 24 were males and 6 were females, which is the usual ratio of 4 to 1. As to the age periods, there was one in the third decade, two in the fourth decade, five in the fifth, eighteen in the sixth, and four in the seventh decade. The greatest number was found between 55 and 65 years of age. The location

of the tumor was 22 at the pyloric third, five in middle third, and three at the upper third of the stomach. The greatest number was not in the magen-strasse, the point of greatest ulcer frequency. As to the types of the growth based upon x-ray appearance, there were four schirrhous carcinomas, 22 medullary carcinoma, and four malignant ulcers. One patient presented a malignant degeneration of an adeno-papilloma of the pylorus. In 22 of these cases a definite mass could be palpated.

SYMPTOMS

The symptomatology of carcinoma of the stomach is well understood, and the classical group consists of epigastric discomfort, food distress, food distaste, loss of weight, nausea, vomiting, hematemesis, anemia, and the like. It is the purpose of this paper, however, to mention only the earliest symptoms these patients observed. Often the onset was so insidious that many patients could not tell exactly when or how the condition began. The earliest consciousness of trouble varied from a sense of fullness and slight distress after eating, soreness, general abdominal discomfort, loss of appetite, to a definite dull pain after meals. Weakness and loss of weight were noted early in a few cases, but nausea, vomiting, marked weight loss and hemorrhage were usually late symptoms. Hematemesis as an early symptom appeared in one patient who had to be studied several times before a malignant ulcer was discovered high on the cardiac end of the stomach. These symptoms may not differ essentially from other gastric or extra-gastric disorders, and therefore when such a patient is in the cancer bearing period, a careful radiological study of the stomach should by all means be made.

In this series, the loss of weight previous to the first examination varied from 2 to 80 pounds, with an average of 30 pounds. The patients usually explained the weight loss as being due to restricted diet on account of the discomfort after eating. Nausea was present at some period in all these cases. Vomiting occurred in 16 cases, and there appeared to be definite relation between vomiting and pyloric obstruction, since from 25 to 75 per cent gastric retention was found in the stomach at the end of six hours by the x-ray. A distressing type of vomiting frequently complained of was the nocturnal eructations of hot, burning fluid. Hemorrhage from the stomach was noted in only two cases. Occult blood was found in the stools in one-half of all cases.

The anemia in gastric carcinoma was quite variable, but was not as pronounced as one might expect. In half of these cases, the hemoglobin was above 75 per cent, and the red count varied from 2,980,000 to 5,000,000. Dehydration concentrates the blood, and gives a relatively higher count than is expected. The cachexia may often suggest the possibility of pernicious anemia, but complete blood study readily distinguishes it from carcinoma. Elevation

of temperature, due either to secondary infection, or to protein reaction from malignant cells invading and destroying surrounding tissue, was found in 18 patients, and varied from 99 to 101 degrees. Ascites was found in three patients, and was associated with portal construction or peritoneal involvement.

CLASSIFICATION

Two distinct groups, so well described by Dwyer, and others, was recognized in this series of cases of cancer of the stomach. 1) The first, or larger group, representing 415, or 80 per cent, were of short duration, averaging five months before first examination, with very rapid progress, but practically no previous history of digestive disturbance. In most cases there was no free hydrochloric acid in the gastric analyses, and the filling defect of stomach was large, and was located at the pyloric third of the stomach. Most of these cases were far advanced when first examined. 2) The second group is smaller than the first, represented by 20 per cent of cases. The history is much longer, averaging 3 years, with previous digestive symptoms very suggestive of ulcer. Free hydrochloric acid was present, in four of these cases, the acid ranging from 50 to 80 degrees. Pathological reports of these four patients, whose growth was resected, showed definite ulcer upon which carcinoma was engrafted. Blackford in 1925 emphasized the findings of free hydrochloric acid in cases of malignancy that gave ulcer history. Freeman and Flinn also found acid more common in the ulcer group.

DIAGNOSIS

The x-ray signs well known and the basis of positive diagnosis is the finding of a definite defect in the gastric silhouette. Since other conditions may produce filling defects, it is very necessary to take into account the clinical as well as laboratory facts, and one must differentiate from benign tumors, bezoars, syphilis of the stomach, gastric ulcer with infiltration of gastric wall, perigastric adhesions, extra-gastric pressure defects from pancreatic tumor, spine pressure, tumor of abdominal wall, etc. 95 per cent of gastric tumors are malignant, and 50 per cent of all carcinoma cases are hopelessly inoperable when first examined. An epigastric hernia, which had anchored pyloric end of stomach to the abdominal wall caused a filling defect similar to cancer. Pernicious anemia often presents constitutional likeness to cancer, but a careful ex-ray examination will distinguish it. One patient having tuberculosis peritonitis presented a stomach outline difficult to distinguish from cancer of cardiac end of stomach. Roentgen ray diagnosis of carcinoma of the stomach should not be accepted without corroborative clinical and laboratory findings. The presence of lactic acid, the Boas-Oppler bacilli, and glucose tolerance test, certain proteolytic serum tests, the Wolff-Junghans test,

etc., are refinements in studying malignancies, but are not essential to a diagnosis of carcinoma of stomach.

MALIGNANT ULCERS

The teaching that all gastric ulcers are potentially malignant has caused unnecessary operations, with possibly sacrifice of life, in some instances. Fortunately gastric ulcers are quite rare in our clinic, though they are carefully looked for, according to Carmen's method of fluoroscopy. The incidence of malignant engraft on ulcer base has been variously estimated from 70 per cent down to 4 per cent, but the conservative estimate is probably about 5 per cent. In this series of 40 cases, four proved to be engrafted on ulcer base. Unmistakable evidence is presented to prove that gastric ulcers do heal, leaving a soft scar that does not produce symptoms or further trouble. Jordan, at Lahey clinic, reported the definite healing of 44 of 67 cases of gastric ulcer.

When should ulcer cases be subjected to surgical treatment? Carmen suspected malignancy in all cases whose ulcer measured 2.5 cm. in width. Jordan has given us a good pre-surgical criterion that seems safe in following. All ulcer cases, not frankly malignant, are put on the strict medical or dietary regimen. The radiological defect is examined every 5 or 6 days, and the niche must diminish in size, the occult blood must disappear from the stool, and clinical condition of patient must be definitely improved. If these three requirements are not satisfactory, laparotomy is advised. Ulcers of the stomach heal better than duodenal ulcers, leaving less scarring or defects.

TREATMENT

Surgery offers the only curative method of treatment of cancer of the stomach, but this requires early recognition of the disease. The type of surgery will depend upon conditions found. Balfour and Harges, in reviewing 1000 cases of gastric carcinoma operated upon, gave as their preference a gastro-jejunal anastomosis after resection, accompanied with a jejuno-jejunostomy. A simple gastro-jejunostomy as a palliative measure will give relief from pyloric obstruction. In our series of 30 cases, laparotomy was done in 20 cases, resection was done in four cases, simple gastro-enterostomy was done in 10 cases. Of these patients, one patient with operation 18 months ago is slowly dying of carcinomatosis, one patient with relief for five years after resection, now has return of the disease in stomach; another patient was successfully resected three months ago, and is doing well. A fourth patient seems to be perfectly well after 10 years following resection. The rest promptly paid the price exacted by this disease.

CONCLUSIONS:

1. The only hope of a cure in cancer of stomach lies in its early recognition and prompt surgical treatment. Popular instructions and professional alertness must combine in making

examination, including a careful radiological study. The operability of cancer of stomach can best be determined by laparotomy.

2. Radiological diagnosis should not be made independent of complete clinical study. Filling defects of benign tumors, extra-gastric lesions, ulcers, syphilis, etc., may simulate that of carcinoma.

3. Border-line gastric ulcers present the greatest difficulty in diagnosis and management. Ulcers of the stomach should be carefully controlled and if unmistakable evidence of healing as determined by x-ray study is not found laparotomy should be advised.

2234 Highland Avenue.

ACUTE RHINITIS IN CHILDREN

By

S. L. STEPHENSON, M.D.,

Corinth, Miss.

Acute rhinitis, acute coryza, acute catarrhal cold is a very frequent condition in childhood. It is of importance because of the nature of the structure of the nose and throat and nearby organs, which may become inflamed.

Predisposing and exciting factors are the micrococcus catarrhalis, measles, influenza, diphtheria, hereditary syphilis, adenoids in the nasopharynx, beginning and ending of the winter season, sudden changes in the weather, draughts, overheating from too much clothing, insufficient clothing, bad or no ventilation, dust and gases from oil stoves.

Symptoms are mostly local—sneezing, a watery nasal discharge which is apt to become mucopurulent if the condition lasts a few days, redness of the anterior nares and upper lip, loss of sense of smell, often dryness of the mouth.

Systemic symptoms may be ushered in with malaise, with slight rigor accompanied by sneezing; a rise of temperature of one or two degrees may follow.

In nursing infants the taking of food is interfered with, owing to the more or less nasal obstruction produced.

If not soon cured, the affection may spread to the lachrymal ducts, conjunctiva, pharynx, eustachian tubes, or give rise to laryngeal or bronchial trouble; too often broncho-pneumonia. The duration of this condition may be a day, a week, or more according to the circumstances.

In the treatment prophylaxis is important. No one suffering with a cold should be allowed with others. Infants and young children should be kept away from crowds, motion picture theatres, etc. Early training to out-of-door life is important.

An initial purgative is always of benefit; calomel in small doses, castor oil or cascara sagrada aromatic; or the salines in older children, confinement to one room, protection from

draughts, indoor dust. Put the patient to bed if there is fever. In the initial stage of engorgement of the very young, liquid albolene, or olive oil dropped into the nose, or better still, one-half grain menthol to a like amount of camphor to one ounce of liquid albolene instilled into each nostril two or three times a day facilitates freer breathing and increases warmth and circulation to the tissues. In both stages of the infection the instillation of ten per cent solution of argyrol, neo-silvol or lunasol are of much benefit in soothing the membranes and inhibiting the progress of the inflammation.

In older children, weak adrenalin, or the ephedrine solutions are valuable in shrinking the congested tissues. In my opinion, the two latter drugs are irritative to the membranes where used too regularly.

In children of two years or more, suffering much discomfort, the use of acetylsalicylic-acid or phenacitine is very effectual.

In the initial stage and where confined to bed the daily hot foot bath is helpful. Small doses of quinine where there is no middle ear involvement has good tonic effect.

To prevent recurrence of the common cold, the child should be fortified by a balanced diet of milk, eggs, vegetables and fruits or fruit juices.

These children should have an extra amount of rest.

The medical features should be the administration of cod liver oil, viosterol and tonics where consistent. Cold vaccines are worthy of trial in most cases.

In the absence of proper sunshine the daily exposure to the sun ray lamp is beneficial.

The prescribing of iodized calcium for the tissues and the alkalies to support the alkalinity of the system is valuable.

Of the exciting factors of rhinitis we are all familiar; but in these little patients so susceptible to repeated infections we should be further concerned that we are dealing with an endocrine dysfunction or a protein sensitiveness.

So far as we know at present there is no practical way of preventing the contagious form of colds.

Colds vary much. In the same individual there may be one or more infection of different type during a season. In the spring and fall of the year this upper respiratory complaint is most manifest and we should advise parents of the seriousness of it.

Realizing that I have added nothing to your present knowledge on this topic, yet, if it stimulates you to greater effort to combat this all common distressing ailment, the paper has served its purpose.

To seek peace and pursue it is the first and highest duty, both of this generation and those that are yet to come.—H. R. H., The Prince of Wales.

ALOPECIA MASSIVA

ETIOLOGY AND TREATMENT

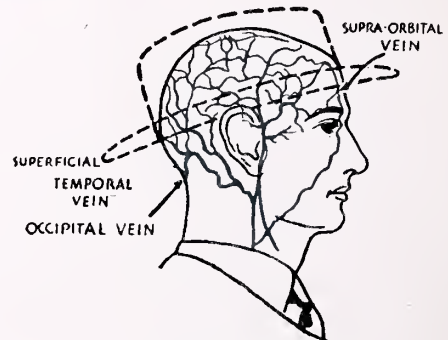
By

JOSEPH H. GRAVES, M.D.,

Houston, Texas

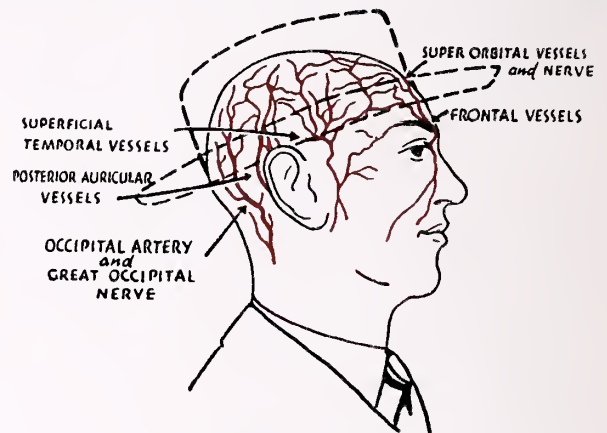
(Read before Harris County Medical Society at Houston, Texas, 1924; also at Cameron, Texas, before Milam County Medical Society in 1924.)

For many years I have known the etiology of bald heads and in order to make myself clear I will have you review the circulation of the



VEINOUS SUPPLY
to SCALP

scalp with me, and as we view the chart we notice the complete blood supply with some



ARTERIAL SUPPLY
to SCALP

vessels that pass out of, and others that enter the bony skull through certain foramina.

First—Suprorbital.

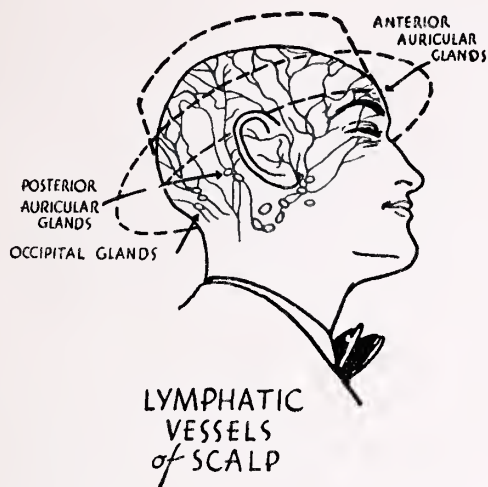
Second—Temporal.

Third—Mastoid.

Fourth—Occipital.

Of all the anatomy of the human body this is the only parallel case to this circulation; that is where a bony structure, such as the cranium, is covered by compressible vessels coming out of the skull and passing back into it through small foramina leaving a cordlike vessel which is easily compressed against the bone. The treatment was so simple, that I have been astounded at the apparently otherwise smart men that

have patronized the bald headed barber, who has seemed to thrive more, the slicker and shinier his own pate.



It is passing strange, too, if a fact, and as far as I know, it is true, that of all the quacks that abound in our profession, none have made bald heads their specialty, nor can I call into consultation one lone chiropractor who has specialized in bald heads. I realize with fear and trembling that I'm treading upon dangerous ground, with skin specialists, who know the skin and its manifestations of disease far better than I and it is also a fact, that one of these skin specialists, Dr. J. C. Michael, of Houston, Texas, recently showed me the first and only bald-headed woman I was ever able to catch with her rat off, long enough to dub her a bald-headed woman. She has favus, and her mother was also bald from favus. It is not of these I speak, as favus is a real disease.

Having been somewhat of a globe trotter, I have noted audiences in every part of the world, it has been my good fortune to visit. In the so-called heathen tribes, who lead a roving existence, as the gypsy, the greaser, the Australian bush-man, the Senagalese, the Malays, the Chinese coolie, certain Japanese, American Indians, in fact all the pagans and heathen so-called, that I have ever seen, presented overwhelming evidence that bald-heads follow the educated, or civilized populations of the earth, and I do not mean that the uneducated chase these unfortunates, into high brow social circles, but I do mean that the average bald-headed individuals, such as fill the amen corners of the churches, and are prone to occupy front seats at the theatres, and are quite prominent at the political rally, prize fight, wrestling match and baseball game, these are not diseases, and never were.

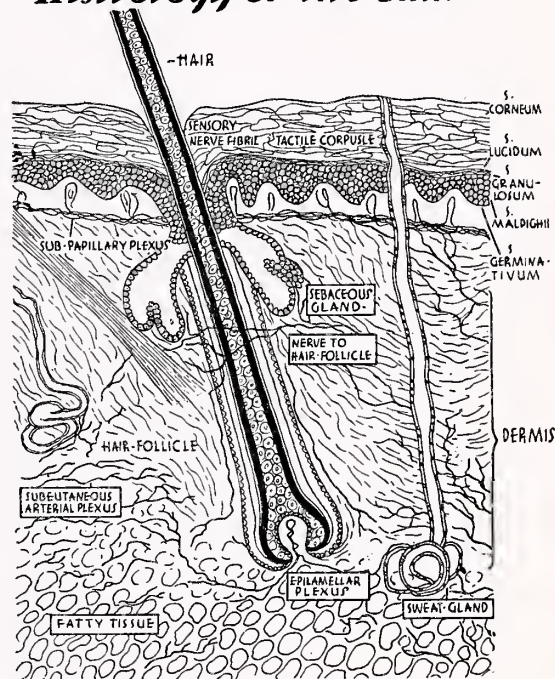
When I see doctors who are afraid to express their opinions, if perchance this opinion run afoul with some leader of medicine, recognized, I always think of Lavarán and Reed, Koch, Loeffler and others too numerous to mention, who had the courage of their convictions, and

chanced to express their views on any subject, which subject, they had studied sufficiently well and zealously enough to entitle them to an opinion.

I also recall the fact that even Einstein's theory was attacked, and still is, I believe. Neither did Darwin at first, get away with his, and when I see articles with a bibliography larger than the original paper, I always feel sorry for the essayist, for he appears as a plagiarist in my eyes. He is simply a copy-cat, and has no opinion of his own!

Now, in all seriousness and in real earnest, permit me at this time to express my own personal opinion, based upon many years of observation, and allow me also to acknowledge no credit for this decision, as I have also seen most of it in print, somewhere, but never in recognized medical authorities. Therefore, I beg of you who hear this paper, not to deal too harshly with me, but just wait fifty years and see if I am not correct. Our hats are only worn one-third of the time, the scalp being supplied during sleep unmolested. If bound all the time, proof would be ample.

Histology of the Skin



I am satisfied experimentally if we place appropriate bands around the craniums of one hundred rhesus monkeys and let them wear these binding girdles constantly for ten years you will have ample proof that binding the cranium alone will produce baldness.

CONCLUSIONS:

This bulb of the hair follicle is supplied not unlike the average irrigation ditch—out near its terminal or smallest ditches, they cry for

more water all the time, while nearer its source crops are fine, no obstructions at all.

1. Bald-heads that I refer to here, are not the result of any disease, as we know diseases, but simply the inevitable result of pressure, a condition, and not a disease. We are all familiar with pressure applied upon the feet of Chinese women. We know the pressure from aneurism, and how a soft artery, merely by pressure, constantly present therein, will invade, and pass entirely through a bone, or much harder tissue than itself. We know, too, that necrosis often results from various forms of pressure. In the late war, wrap-leggings, we found, got wet and drew up, binding the legs and produced Renaud's gangrene (or at least a bilateral gangrene.) Dr. Herman W. Johnson of Houston, called my attention to loss of hair on the legs of men who wear garters to hold up the socks, the hair distal to the garter suffers loss of follicle and is permanently gone. Now, why is it that more men who wear hats are not bald? This is because they either have a heavy head of hair, serving as a cushion, which prevents the vessels obliteration from pressure, or else, their craniums are so shaped that the hat band cannot be brought directly to bear upon the vessels which supply the hair follicles and drain the same, or else, there is some possibility that the vessels themselves may resist this kind of pressure satisfactorily, when aided by the influence above described. To answer this, I might ask why cerebro-spinal meningitis attacks one member of a large family, allowing all the rest to escape? I might point out that comparatively few soldiers in the trenches during winter suffered from bilateral gangrene of the feet, that many had wet wool leggings binding their legs under similar circumstances to those who do so suffer. Why was that? I can't say, except that their feet were better supplied with blood and had better return supply, or wasn't so badly exposed, or had more cover on them.

2. Disease does not select either sex alone (none that I have ever seen.) Who ever heard of measles, mumps, chicken-pox, scarlet fever, diphtheria attacking the boys and leaving the girls go free? Or visa versa.

3. A bald-head, such as I mean here, never, without a single known exception, was woman the possessor.

4. In the same nation only the civilized are bald-headed. Take the Mexican in the City of Mexico, then go out into the mountains, and you find them in proportion to the intelligence and civilization. In other words, the male-hat-wearer, is the bald-headed one. Another etiological factor, to be recognized is—that girls, before the time of bobbed hair, took great pride in a wealth of beautiful hair. She was taught from childhood to wash her hair in soft water, usually rain water, and then go out in a room or porch with sunny exposure, remaining there until every hair was dried in the sun, combing

same with a coarse comb. Then the hair was either plaited or done up so that its ventilation was always good.

Hat-pins fastened the head-gear on the head; no binder of any kind about the head. Not so with the boys; they must wear a tight hat band or cap jammed right down over the head, or chase their hats most of their time. They often wet their hair, to comb it quicker, and with less trouble, then jam the hat or cap down tightly and leap to their play, or go to school. They also are prone to keep on their hats, even in the house. Endocrine may have something to do with bald-heads, but very little; Chinese men have very little beard. And I have always wondered if the lack of beard in the malay race is not an endocrine problem?

5. The beard of males cannot be the cause, as it is proven by the fact that the man who lives outdoors and keeps his hat off, has as much beard as his civilized brother who keeps on his hat. Therefore, we believe we have proven beyond peradventure, that bald-heads are not the result of disease, but are mechanically produced, by head-gear such as is worn by males.

6. If girls with bobbed hair bob it more and more, and then cut it short, and are foolish enough to finally adopt the present male head-gear, it won't be long until women will also appear bald.

7. Creation had little to do with it; ask any obstetrician which sex has most hair at birth. Whoever saw a bald-headed child (beyond infancy) except disease produced?

TREATMENT

The treatment is: To discard the present head-gear of males, and either use one which does not constrict or bind the cranium, or wear none at all. Treatment, then, is purely prophylactic, remembering bald-heads are produced by binding children's heads from one year to the end of life. If this is done (that is, hats discarded) all your bacterial theories, such as dandruff, and the like, will melt like Miasmi did in Osler's practice, before Laveran's microscope.

The reason why bald-heads will not grow hair is because the capillaries and lymphatics which carry nourishment to the bulb of the hair follicles and carry away effete materials and toxins generated within the scalp itself, have long since been atrophied, and obliterated, so that you have the dead, or lost follicle, in the areas cut off by the pressure before mentioned. We have an obliterative end-arteritis of the delicate subcutaneous arterial plexus, and this produces strangulation and thus the pressure ischemia fatal to the bulb of hair follicle. The damage is done when a boy, and on up till grown. There may be, through heredity, a round head, or one giving him a tendency to baldness, but it could soon be overcome by sunshine and ventilation, and the generations to come will have fine heads of hair if only they quit binding their heads. It has been said, and I believe it is true

to a certain degree, that owing to the shape of a baby's head, one can foretell whether he'll be bald in front, behind, in the middle, or all over, according to whether the head is round or elongated. If round, he'll be bald all over the top of his cranium(?) Or, if cranium is elongated antero-posteriorly, he'll have a bald top or back, one or the other, or both?

The reason prompting this paper is—to convince parents that they are making their children bald, by the present style of headgear, and to assure them, that in the future, they will preserve their children's hair, or destroy it, according to whether they permit the present form of headgear to be worn, or discard it.

Please permit me to lift the curtain of the future, and let us imagine a group of young people, in a drawing room, viewing the pictures on the walls, of their forefathers! Can't you hear someone of them say: "Wasn't grand-dad a handsome old fellow? But oh! my, wasn't he foolish to have worn a hat?"

PYELITIS

By

F. L. McGAHEY, M.D.,

Calhoun City, Miss.

Pyelitis is an infection of the kidney pelvis. It is often associated with involvement of the kidney substance, in which case the process is known as pyelonephritis, or if septic foci develop it is known as septic pyelonephritis.

ETIOLOGY

Pyelitis is practically always caused by bacterial invasion. Any obstruction to the urinary tract, especially along the ureters vitally lowers the resistance of the kidney pelvis and affords a favorable culture medium for infection and growth of various micro-organisms. Before we have a pyelitis, we usually have a lowered resistance, obstruction somewhere along the urinary tract and pyogenic micro-organisms present. The exciting cause may be any one of several organisms, the most common being the colon bacillus, gonococcus, streptococcus and staphylococcus. Among the contributing causes may be mentioned the following: tonsilitis, abscessed teeth, prostatitis, urethritis, renal calculi or any foci of infection. Pregnancy seems to favor the development of pyelitis which is probably caused from pressure from the gravid uterus. This type of pyelitis usually persists until after delivery and often continues beyond the period of gestation.

MODES OF INFECTION

The modes of infection are urogenous, or where the infectious process extends up the urinary tract to the pelvis of the kidneys. This course is thought to be responsible for most cases and especially is this true in those cases that occur in girl babies. The infection gains entrance to the urethra, often from soiled nap-

kins or from unclean bath tubs and proceeds upward through the urinary tract to the kidney pelvis. Hematogenous or through the blood stream. This accounts for those cases that are the result of abscessed teeth, tonsilitis, otitis media, prostatitis and other foci of infection. And third, from direct infection as from wounds of the kidney or from the direct extension of a related inflammatory process. Infection by this route is extremely rare and is of secondary importance to the first two mentioned above.

SYMPTOMS AND DIAGNOSIS

The onset is usually preceded by a period of indisposition, with general malaise, loss of appetite and general discomfort. Sometimes the onset is sudden without any prodromal symptoms. Temperature varies widely, not only in different cases, but often in the same case. One patient may pass urine loaded with pus and run a temperature around 100 or 101, while another patient may pass a very small amount of pus in the urine and run a temperature of 104 to 105 or even higher. Sometimes we find remissions and intermissions in the temperature which may occur several times during the twenty-four hours and probably due to some interference with drainage from the kidney pelvis.

Chills. We frequently find cases of pyelitis that are ushered in with a chill of more or less severity and often causes one to make a mistaken diagnosis of malaria. These chills may recur for several days and several times during the day. This is an important point in differentiating from malaria. In children the chill is often replaced by a convulsion.

Pulse and respiration are not affected any more than in any other febrile condition.

Nausea and vomiting seem to be a fairly constant symptom, especially during the onset of the disease or during an exacerbation.

Dysuria. Pyelitis is so often associated with cystitis that dysuria may be classed as a symptom of the former.

Pain, usually in the form of headache, general body pains and usually associated with pain in the kidney region. This pain in the kidney region may be absent in the most severe cases or present in cases of less severity. When present it usually radiates down toward the pelvis and in males often into the testicle on the side involved which is an important differentiating point between pyelitis and gall bladder disease. This pain and tenderness in the kidney region is often of such severity as to greatly interfere with proper palpation of this region.

LABORATORY FINDINGS

Blood. The blood shows the same picture as in any other pyogenic process with a tendency to a secondary anemia.

Urine. We usually find a rather high percentage of albumin and a varying amount of pus

in the urine. When we find the clinical symptoms of pyelitis and have a negative urinalysis, we should always consider the possibility of having a blocked ureter and should make repeated urinalysis or examine a catheterized specimen. In cases that do not clear up promptly, some or all of the various renal function tests should be employed. All chronic cases should be subjected to an x-ray examination in order to determine the size and position of the kidney and also the presence of renal calculi.

DIFFERENTIAL DIAGNOSIS

From cystitis it is differentiated largely by the pain and tenderness being in the kidney region in pyelitis and in the bladder region in cystitis. There is also a higher percentage of albumen in pyelitis.

Kidney abscess and pyelonephritis are differentiated by the presence or absence of casts, x-ray findings and the course of the disease.

Diaphragmatic pleurisy and sub-diaphragmatic abscess are differentiated by the history, presence and cough, painful respiration and the difference in the urinary findings.

Malaria is differentiated by the presence of malarial parasites in the blood, the history of the case, especially as to the time of the chill and also by the urinalysis.

Renal tuberculosis is probably more difficult to eliminate than any other condition. To make the differentiation often requires microscopical, bacteriological and cystoscopical examinations and repeated guinea pig inoculations.

PROGNOSIS

In uncomplicated cases the prognosis is practically always favorable. The course and prognosis is greatly influenced by the type of infecting organism, the promptness of diagnosis and treatment and other factors, especially the age. In young children the process is more likely to be a stormy febrile one. As a rule it is several weeks before the urine is entirely free from pus. The cases with renal calculi are very resistant to treatment and often requires surgical intervention. A fatal termination is rare and when it does occur is usually the result of toxemia or some complication, most frequently a pyelonephritis.

TREATMENT

There is no line of treatment that has met the unqualified endorsement of the medical profession. There should always be a division of effort between relief and cure with special attention to the prevention of complications.

GENERAL CARE

During the first few days, or the febrile period, absolute rest in bed is indicated. Patient's room should be well ventilated and properly heated. The clothing should be comfortably warm and the surface of the body should not be chilled. If it should become necessary to resort to hydrotherapy to reduce tempera-

ture, warm sponge baths are preferable. Large amounts of water should be given, either plain or as diluted fruit juices. This is done not only to favor dilution of toxins but to flush out the entire urinary tract. The bowels should be kept active by use of saline cathartics. Hydragogue agents should not be used. If patient is unable to retain saline cathartics, colon irrigations will usually give good results.

DIET

During the stormy period, especially if the temperature is high, one should be guided by the digestive ability and nutritional needs of the patient and at the same time avoid all irritants or anything that might interfere with the proper functioning of the kidneys. During this period the diet should consist of an abundance of water, diluted fruit juices, malted milk, simple soups and cereal broths. After the temperature has subsided, such articles as milk toast and well-cooked cereals may be added to the diet. Spices and all highly seasoned foods should be prohibited. Even after convalescence is established and patient is taking a liberal diet, all renal irritants should be forbidden. As the period of pain, high temperature and discomfort is usually short, there is no indication for a very liberal intake of food at the outset, but as the patient improves and his digestive ability becomes more favorable, a more liberal diet should be given, but always, as above stated, avoid anything that might cause renal irritation.

MEDICATION

The methods of treatment of pyelitis, so far as medication is concerned, have been subject to as much difference of opinion as have the avenues of infection. In my opinion, if the cases are seen early, potassium citrate, given in large quantities of water, will practically always relieve the distressing symptoms. The successful use of the citrate depends upon our ability to promptly and thoroughly alkalinize the urine. In most cases this can be done in thirty-six to forty-eight hours by giving ten to twenty grain doses, according to age, every two or three hours. As soon as the urine is thoroughly alkalinized the dose should be reduced one-half and the interval between doses doubled. If this does not promptly relieve symptoms and alkalinize the urine, large doses of citrocarbonate well diluted with water may be given in connection with the potassium citrate. Ordinarily the patient should be kept on this for about six days after the urine has been alkalinized and then switched to hexamethylenamine, five to fifteen grain doses, well diluted with water, every three or four hours for a like period, during which time the urine should be kept acid in reaction by the administration of acid sodium phosphate. All fruit juices, especially lemonade, should be withheld during this period. If,

during this time, the patient should develop a dysuria or a hematuria, the hexamethylenamine and acid sodium phosphate should be stopped at once and the alkaline treatment started again as outlined above. It is thought that frequent changes in the reaction of the urine inhibits the development of the exciting micro-organism, hence the reason for switching from one line of treatment to the other every five or six days. This medication should be continued until the urine has been repeatedly free from pus and all micro-organisms.

VACCINE THERAPY

Vaccine treatment of pyelitis has generally proven unsatisfactory. The best results have been obtained in chronic cases and in those cases that are the result of specific urethritis. Autogenous vaccines have given better results than stock vaccines.

PELVIC LAVAGE

Possibly the most effective form of treatment of pyelitis is pelvic lavage. This should be done every four to six days, using a 1% solution of either mercurochrome or silver nitrate, preferably mercurochrome, and continued until the urine has been repeatedly free from pus and all micro-organisms. I am of the opinion that the simpler plan of treatment should be given a fair trial before resorting to pelvic lavage which should only be done by someone especially trained in the technique.

SYMPTOMATIC TREATMENT

There are certain symptoms that often occur that require special treatment, the most important being dysuria, high temperature and nausea and vomiting.

The dysuria is usually relieved by administration of large amounts of fluids, hot or cold applications and bladder irrigations with warm boric acid solution. If due to the administration of hexamethylenamine, the citrates and tincture of hyocyanus will relieve.

High temperature can be controlled by rest in bed, plenty of ventilation, ice bag to head and proper bathing, with small doses of acetylsalicylic acid.

Nausea and vomiting can usually be relieved by rest, proper attention to diet, carbonated drinks and large doses of sodium bromide.

In addition, a complete physical examination should be made of each case of pyelitis, with special attention to teeth, which, if abscessed, should be removed. Constipation, if present, should be prevented. Infected tonsils should be removed, and rectal conditions, such as fistulae, hemorrhoids, fissures, chronic prostatitis and all other foci of infection should receive proper treatment.

CHAIN STORE OR DEPARTMENT STORE MEDICINE

State operation and state control of medicine ruined medical practice in Germany and has given the people of that country the worst medical service administered in any civilized country in the world.

When an institution such as a university or a corporation enters into the practice of medicine, as is the case in many instances at the present time, there come up certain points of interest to the medical profession.

A university is endowed for education, research and scholarship, and when it enters the practice of medicine it is dealing unfairly with the private practitioner. "Unfair," because this institution has the enormous advantage of reputation and size to attract patients; "unfair" because of endowments it is able to practice medicine at much lower rates than must prevail in private practice; "unfair," because it is the only department of the university which even considers entering into the business which it aims to teach; "unfair," because even if it charges large fees its prestige would make it an impossible competitor with the private practitioner.

Much is being said by economists about only the very wealthy and the very poor getting the maximum of medical service, and so leaving the great middle class unable to procure the so-called maximum service. This statement is not accepted by thinking medical men. We believe that the private practitioner is giving good service and sees that his patients get what they need at a price they can afford to pay.

There is a strong tendency at the present time to systematize or machine out the most desirable thing in the practice of medicine, and that is the very personal contact of physician and patient. This personal contact cannot be removed without jeopardizing the best interests of the physician, the patient and the public. Chain store or department store medicine is detrimental to the welfare of both the physician and the public.

It is important under the present standard of ethical procedure that groups practicing medicine must adhere to the same ethical principles as regulate individuals. Because of their size and influence, corporations are in no way relieved of the ethical responsibility that applies to general practitioners. If the staff of corporations engaged in the practice of medicine fails to recognize this fundamental principle, then all the men connected with the staff should be amenable to the same discipline as if they were individual practitioners.

In Illinois a lay corporation cannot practice law and the Bar Association sees that it does not. With our legislature composed largely of lawyers, we fail to understand why the legislature is not willing to throw the same safeguards around the medical profession that it grants to

When you come to the end of your rope, tie a knot in it and—hang on.—Western Hospital Review.

the legal profession.—Charles J. Whalen, Editor Illinois Medical Journal.

THE HIGH COST OF THE UNDERTAKER

The undertaker is proverbially known as the last man to take care of our remains. The doctor is the one to pronounce us ready for the undertaker.

The California Funeral Directors' Association started an investigation in San Francisco, and the district attorney's office is bringing an undertaking firm and a doctor to task for dividing the profits in the last rites bestowed upon some individual. We have a statute in California which makes it a misdemeanor for the undertaker to divide his fee with the doctor. A similar statute should apply to the druggist and the doctor. The high cost of medical prescriptions might also be attributed to a division of fees.

It is unfortunate that doctors are not able to collect their own fees; then it would not be necessary for the druggist and undertaker to charge excessive fees for their services.

The Owl Drug Company has always declined to divide their profits with the physician, which has been a great factor in discouraging that form of petty graft among the druggists on the Coast. Nor do they permit substitution in a prescription. The physicians have learned to realize their reliability. It must have paid the "Owl" to be honest, as they have made a wonderful success of their business. Their stock is above par and they have established a lucrative business in each of the larger cities on the Coast.

You feel better when you act conscientiously with the inner man, and in the long run it pays in dollars and cents. It pays to eliminate graft and substitution in any line of business.—The Compend of Medicine and Surgery.

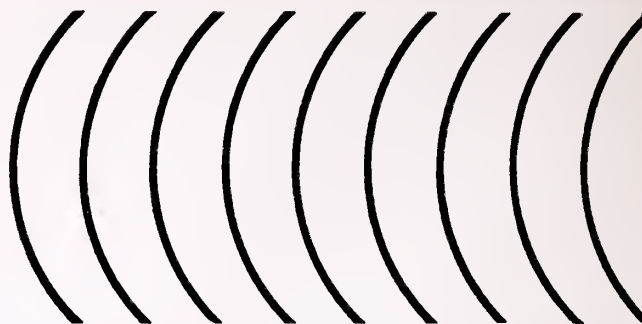
No man claims "It can't be done" who is willing to try.—Radiological Review.

Difficulties are things that show what men are.—Epictetus.

Out of the darkest cloud peeps the brightest sun. Oftentimes trouble is only a necessary step to happiness.—Radiological Review.

Garlic, it is said, is a good preventive of flu. Well, we suppose even a germ must draw the line somewhere.—Philadelphia Inquirer.

The doctor's small daughter had strayed into his consulting room and was watching, wide-eyed, as he tested the heart and lungs of a patient with the stethoscope. Suddenly she spoke: "Get any new stations, Daddy?"—Colorado Medicine.



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OUR MOTHER

How oft some passing word will tend
In visions to recall
Our truest, dearest, fondest friend—
The earliest friend of all.

Who tended on our childish years,
Those years that pass as hours;
When all earth's dewy, trembling tears
Lie hid within her flowers.

Thou star that shines in darkest night,
When most we need thy aid;
Nor changes but to beam more bright
When others coldly fade.

Oh Mother! 'round thy hallowed name
Such blissful memory springs,
The heart in all but years the same,
With reverent worship clings.

Thy voice was first to greet us, when
Bright fortune smiling o'er us;
And thine the hand that's readiest then
To lift the veil before us.

Or, if dark clouds close 'round our head,
And care steals o'er the brow;
While hope's fair bowers fall crushed and dead
Unchanged still art thou.

—Anonymous.

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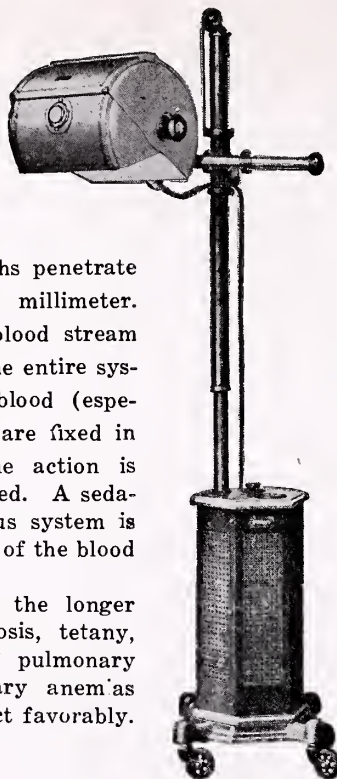
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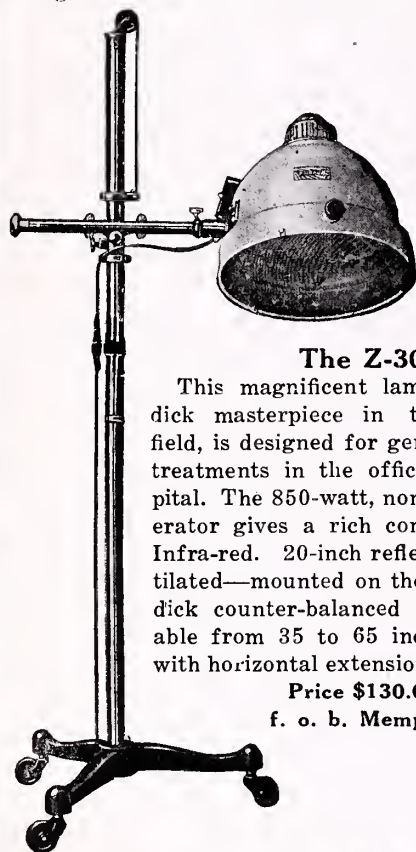
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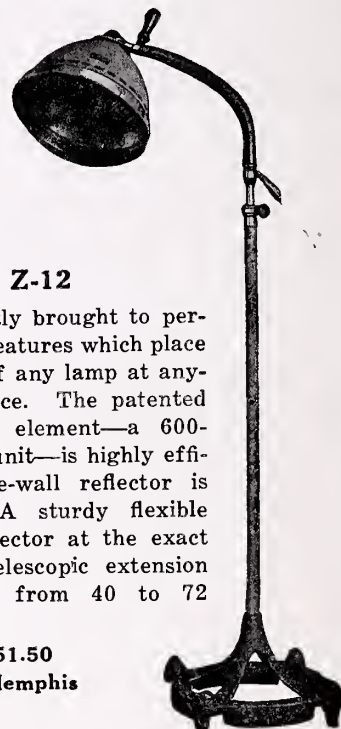
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MISSISSIPPI MEDICAL SOCIETY

Booneville, Miss., 114 Main St.

W. H. ANDERSON, M. D., Editor and Manager

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We are copying some papers from other journals this month that we trust you will read with profit.

If every practitioner in Mississippi will see that his clientele has plenty of quinine for two weeks now and two weeks in September he will have prevented sickness and deaths and rendered a noble service.

The age of preventive medicine is now here and it behooves the profession to acquire new information and adjust itself to the new undertaking.

Vicksburg with its accumulated history and its culture and refinement will entertain the State Medical Association in royal style.

You will read with interest and profit the paper of Dr. W. W. Strange, on "The Prevalence of Gonorrhea and its Treatment." Dr. Strange has been with the association only about a year and this is his first appearance before the society with a paper.

The American Proctologic Society will hold its 31st annual meeting in Buffalo on June 22, 23 and 24. Its headquarters will be the Statler Hotel. The first day of the meeting, Sunday, will be given over to entertainment. If the proctologist is looking for pleasure and profit in one trip he no doubt will find it at this meeting.

If the physicians of Mississippi should become sufficiently interested to put ten dollars each in a journal, it could be made a great power for good in organized medicine.

To the National Tuberculosis Association and to Dr. Henry Boswell jointly we offer our most cordial congratulations. The presidency of this association is an outstanding honor and distinction and it has fallen on shoulders worthy and well qualified. In Prentiss County Dr. Boswell's name is still a household word after thirteen years' absence because he impressed himself so thoroughly upon the minds of the people in his public health work just previous to his going to the sanatorium as its superintendent. Our tuberculosis sanatorium, we believe, is the best equipped in the world. This is the handiwork of Dr. Boswell. It is the concrete realization of a great mental concept. We are elated over the honor bestowed upon Dr. Boswell.

We have a number of physicians in our association who have not yet paid their dues for this year. We want to urge them to do this. To pay your medical dues is just as important as it is to pay your grocery bill. Suppose you make the effort and keep yourself clear of the "dead list."

"Not many years ago the tuberculous were diagnosed to die; today they are diagnosed to live."

CONVALESCENT BLOOD AND SERUM IN THE CONTROL OF MEASLES

Lanpher, Howard A. and Moore, Fred—The Journal of the Iowa State Medical Society, 20:78-79 (February) 1930.

The use of convalescent serum for the modification and control of measles is a safe and sane procedure, easily performed and will save much loss of life by the prevention of dreaded complication.

The purpose of the administration of convalescent serum should not be a complete passive immunity because such immunity is only temporary, and having been lost within about two weeks, it leaves the child as susceptible as before.

The ideal to be sought is attenuation of an attack rather than complete protection. This allows a mild attack devoid of complications. While it prolongs the incubation period by about 3 days it shortens the duration of the actual attack. Such a modified attack results in an immunity which is complete for the rest of life. All children known to have been exposed to measles should have the benefit of such attenuation, and especially is this true of children under five years of age, since it is in this group that broncho-pneumonia as a complication is so frequently a cause of death.

Foreign sera from lower animals have been used, but results have been disappointing and unsatisfactory, hence the use of human convalescent serum is advisable.

This has led investigators to experiment with parental serum or whole blood on the theory that every parent has had an attack of measles and that such parental serum or blood is, in fact, convalescent serum. The result has been satisfactory.

The following three reasons are advanced for the use of parental serum or whole blood.

1. It is readily obtained.
2. There is less objection on the part of the parents if their own serum or blood is used rather than material from a member of some other family.
3. The use of parental blood or serum precludes the necessity of a Wassermann test or of a test for sterility if done under proper technic. Furthermore, such serum or blood is harmless as to reaction or ill effects.

The method of obtaining parental or other convalescent serum and of its administration follows:

Blood is withdrawn from the most convenient vein of the donor into a large glass syringe and immediately expelled into a 60-c. c. glass ampule which is capped at either end with a rubber cap. The amount of blood to be drawn is approximately twice the amount of serum desired. The ampule is then shaken thoroughly to prevent adhesion to the side and set away in

a refrigerator for from 12 to 24 hours. At the end of that time the blood clot will have floated clear and the serum may be withdrawn into a suitable-sized syringe through the bottom cap without disturbing the clot. The size of the syringe will depend upon the amount of serum desired and the number of patients to be treated. The serum is then injected between the scapulae where there is much loose tissue and therefore little pain upon administration. A very small needle is used. Absorption is very rapid and there is no local or general reaction.

The dose of the serum is proportionate to the age and size of the child and to the time elapsed since the donor has had the measles.

For a partial passive immunity which will allow the child to have a mild attack, the accompanying table is suggested. The table is based upon the assumption that the donor has had measles at least five years previous to the time the blood was drawn.

In using serum from donors three months or less after defervescence and for the purpose of influencing the type of measles so that a modified attack will develop, the dose is 2.5 c. c. to 3 c. c., injected from the fifth to the tenth day after exposure. These doses are calculated for children 3 years of age. They should be proportionately higher for older children and adults.

Age of patient and amount of serum to be injected:

Age	Amount of Serum
15 yr.	25 c. c.
12 yr.	22 c. c.
9 yr.	20 c. c.
6 yr.	20 c. c.
4 yr.	12 c. c.
3 yr.	10 c. c.
2 yr.	8 c. c.
1 yr.	6 c. c.

Another method provides for the use of sodium citrate solution.

The blood is withdrawn as previously described through a 16 gauge Luer syringe into a 500-c. c. bottle containing 20 c. c. of a 25 per cent solution of sodium citrate and 0.3 gm. of oxyquinoline sulphate (chinosol) as a preservative. This preparation is an efficient bactericidal agent, does not destroy the red cells and is not irritating when injected intramuscularly. The bottle is placed in the ice box and the cells allowed to settle, or they may be centrifuged and the serum pipetted off. For dosage see table.

For those who do not wish to employ these methods, it may be stated that good results have been obtained by the use of parental whole blood. This method also obviates the necessity for Wassermann and sterility tests, always taking into consideration the history of the parent donor. The method of using whole blood is as follows:

Place the donor parallel with the recipient, the recipient being in the supine position. With-

draw the blood from the median basilic vein of the donor. Change needles and inject at once into one of the larger muscles of the recipient. The muscles on the interior surface of the thigh are usually chosen. When whole blood is used instead of serum, double the amount recommended for serum should be injected.

To obviate the possibility of clotting inside the syringe or needle, an appropriate amount of sodium citrate solution may be drawn into the syringe before filling it with the blood. Sterile sodium citrate is a commercial preparation and may be obtained from biologic supply houses.

For best results convalescent blood or serum should be used before the fifth day after exposure.

PREVALENCE AND TREATMENT OF ACUTE GONORRHEA IN THE MALE

By

W. W. STRANGE, M.D.,

Booneville, Miss.

Mr. President, Members of the Thirteen County Medical Association, Ladies and Gentlemen:

I feel and consider it an honor to have the opportunity to read a paper before this assembly. I wish to discuss Nisserian infection from the following standpoints: Prevalence, means of checking its spread, anatomy involved in acute stage in the male, and treatment.

Gonorrhea is a disease that dates back to Biblical times. It is one of the oldest diseases that we have to deal with, the history of which I will not go in to; yet, in spite of its age, we are at a loss for a specific treatment. It is one of the most prevalent diseases of today. Statistics show that no land or nation is without its inroad. In New York state a survey was made covering 57 counties, or a population of six million. On the day of this survey the cases of gonorrhea treated or under observation in clinics, hospitals and state institutions numbered about 12,637, or about two cases out of every thousand population. In the state of Mississippi during the month of January, 1930, there were 2,231 cases of gonorrhea reported compared to only 162 cases of cancer and 239 cases of tuberculosis. In Prentiss county during the month of December, 1929, the practicing physicians reported 20 cases of gonorrhea as compared to three of cancer and two of tuberculosis.

So we see from these reports (though they do not give one-half of the cases of gonorrhea that were and are in existence) that the disease claims a large number of victims each year. This unpleasant, hideous, and treacherous disease is largely responsible for an enormous economic loss to the world yearly. It is also responsible for thousands of operations on both women and men. It is directly responsible for complications of various organs of the human

anatomy, chief among which are endocarditis and arthritis, and numerous other complications, causing misery and loss of usefulness among our young men and women. It seems that in view of these startling facts people would rise up as an army and combat one of the greatest enemies of mankind. If the medical profession would put forth honest efforts in trying to educate the laity as to the necessity for their co-operation in combating this disease it would be a step forward in a glorious undertaking. In order to accomplish very much towards this end it will be necessary to put on a campaign similar to those waged in the fight against tuberculosis, cancer and various other diseases. (Dr. Black, of Hot Springs; says that in order that the people may be aroused to the need of co-operation two things are necessary to curb the spread of gonorrhea, and until these are done it is certain to continue on its increase). First, is public education; second is purely medical, a campaign to increase scientific knowledge among practitioners being imperative. In the light of our present knowledge of the disease, the fact that it continues to spread brings a strong indictment against the profession. Much thought has been given to this question from a sociological standpoint, but, before any marked advances will be noted it will be necessary to throw aside mock modesty and look the facts squarely in the face as they exist and fight with determination to eliminate the disease.

I may ask, What is gonorrhea? Gonorrhea is a contagious catarrhal inflammation of the genital mucous membrane, usually the result of sexual congress and due to infection by the gono-coccus of Neisser. The incidence of gonorrhea as above stated is appalling, representing 60 to 90 per cent of the infections of the genito-urinary tract. Statements that gonorrhea and syphilis cause more deaths than tuberculosis and pneumonia are probably not far from right. The infection perpetrates itself by gaining lodgment in certain gland structures. The treatment should be directed at eradicating these foci of infection. In the male the periurethral, Cowper's, the prostate, and the seminal vesicles deserve special consideration; in the female the vulvo-vaginal or Barthelian, Skene's, and the cervical glands demand particular attention.

In acute gonorrhea, within twelve hours after exposure, the organisms begin their siege by burrowing into the many follicles that stud the urethra throughout its length, and soon are safely hidden away beneath the barriers, difficult for any agent to penetrate. In rare instances we observe cases who report within the first twelve or twenty hours after noting a discharge and here abortive treatment with a single injection of a 2% silver nitrate solution following a 1% novocain local anesthesia will frequently effect a cure, but these cases make up a small percentage of gonorrhea seen, probably

not more than 1%. The druggist sees most of these cases first. Self treatment is always disappointing, even in the hands of the most intelligent patient. The doctor must personally institute the therapy in Nisserian urethritis. If he is too busy to do this, he should turn the case over to a physician who will. It is hard to find a drug capable of penetrating the mucosa and killing the organism found there without injuring the tissue. Every injection of whatever medication used into the urethra must be held in for at least three to five minutes, never long enough to produce fatigue and relaxation of the cut-off muscles. For the first few days the patient reports to the office morning and afternoon, thereafter once daily will suffice. It is necessary for the patient to urinate before each treatment and these treatments should be often enough to keep a small amount of the solution used in the urethra for the eradication of the organisms that may submerge from the glandular tissue that they have been harboring in.

I have found it, in my practice, advisable to alternate the medications in order that the organism will not become fast. For these treatments I agree with Dr. Black who uses a high percentage of non-irritating solution, repeating it often. The object of urethral injection can be no other than to prevent growth of the gonococcus along the mucous surface. One of the drugs that comes near fulfilling this purpose is Neo-silvol in a 25% solution. It can be easily used by a patient without very much danger of stricture and complications provided he has been properly instructed how to use it.

It is believed that the organism when confined to the deep structures produce enough specific gonophages to completely kill themselves in four to seven days. This being true, one fight is to avoid the surface spread of the bug along the mucous membrane.

Mercurochrome in $\frac{1}{2}$ to 1% solution has proven very satisfactory in many cases and affords an excellent alternating drug with neo-silvol. These two drugs can be used in the home by the patient alternating daily from one to the other after he has been properly taught how to inject and retain the solution. I prefer the patient to report at the office twice daily for treatments. For these treatments I use a weak solution of warm potassium permanganate, thereby cleansing the urethra. I advise the patient to use hot baths, if possible, otherwise to soak the affected parts at least once a day, better, two or three times, in hot water for fifteen or twenty minutes. Take regular hot baths and avoid chilling, a mild laxative to keep the bowels open, avoiding constipation, restricting the diet, sexual excitement, over-exercise and indulging in alcohol; avoid most everything by mouth that is irritating to the buccal mucosa. As the old saying goes, "Things that burn or irritate the mouth will have like effect upon the excretory organs." I strongly advo-

cate drinking plenty of water. As the old maxim goes, "To properly treat gonorrhea we should advocate water freely, externally, internally and eternally." I have found that drugs for internal treatment should be alternated every three to four days, such as Kapricol Compound, Methyline blue and Urotropian, mild and septic to the urogenital tract; if too much stinging and burning sensation with priapism I use triple bromide tablets three times a day. These drugs seem to alleviate some of the discomforts of urination. I watch the patient closely for any symptoms of posterior urthritis.

When these symptoms develop they should be treated as a chronic case. After the discharge and local symptoms clear up I usually treat the patient ten days, then rest without any treatment for five days; then I subject the patient to a series of tests to see if it is possible to light up the disease. These consist of a series of injections every other day of, say, a $\frac{1}{2}$ % solution of silver nitrate and make a smear for the bugs next day; then $\frac{1}{4}$ % solution of acriflavine and smear; then sounding out the anterior urethra with a sound large enough to properly dilate the mucous membrane, make another smear the next day; then massaging the prostate and various glands of the structure, make another smear, allow the patient to make strenuous physical exertions and see if that will bring about a discharge. Culture and smear from the centrifuge specimen of the urine for the organism, examine the urethra with an endoscope for area of infection. If these tests do not institute the re-appearance of the discharge in cases of acute anterior urthritis I am persuaded to believe that they are well.

I have treated a large number of Neisserian infections, and the only ones I am sure have been cured are those that have been subjected to the above regime.

1. Gonorrhea the world over is one of the worst scourges of mankind.

2. The public should be taught the seriousness of the disease, the importance of seeking medical advice at the first symptoms.

3. Any method of treatment aiming at the elimination of this suffering, and of the need for mutilating operations, should be carefully scrutinized before discarded.

4. A sufficient number of tests should be made to assure the patient of a cure before releasing him.

"Nearly all lay persons and many doctors expect too much of x-ray plates as an aid in diagnosing beginning tuberculosis."

"The tuberculous die in every climate, and the tuberculous get well in every climate."

"Constipation is one of the most difficult problems of the patient, especially in women patients."

SOME OF THE FUNDAMENTAL PROBLEMS OF THE MEDICAL PROFESSION

By
W. H. ANDERSON, M.D.,
Booneville, Miss.

The chief duty of a medical editor is to educate his clientele. The educated person is one who can adapt himself to his surroundings; can do better with less than the uneducated. He is one who is able to walk entirely around a subject, look at it from all angles, discard the defects, sum up the essentials and put them in a "nut shell."

Until fifty years ago, medical science was looking through a glass dimly. Since then, progress has been as swift as navigation by air; too swift, in fact, for a lone man to keep step with it all. Science still has its enemies, its fakes and fakers. During the last half century of discovery and development, curative medicine has made great progress. But we are now in the early morning of a new era, in the profession, that of preventive medicine and preventive surgery. To bring modern medicine to the rank and file, to the masses, at a cost at which it may be freely utilized is the challenge to the profession and it represents the greatest social and economic problem of our nation today. To accomplish this noble undertaking, there must be team work; we must have co-operation between the practitioner and the health departments, and also between the practitioner and the specialist. There must be a bringing together, a classifying and a codifying of medical knowledge among all classes from the faithful nurse to the most highly specialized specialist, and this medical knowledge must be applied to the social and economic life of our people.

To succeed in this momentous undertaking the practitioner must be shown a vision, and he in turn must educate his clientele. Much of this knowledge will have to be converted into a digestible form and given to the public through the lay press since the busy practitioner can not take time to do it all as rapidly as it should be done.

One of the first moves in this theatrical performance of service to the public will be a redistribution of physicians, and evening up of the suffering rural communities and the overcrowded city. There has been a strong tendency on the part of some specialists and even general practitioners to measure their success by enormous fees extracted by high power salesmanship rather than the productive service rendered their patients. And other members of the profession have been not unlike the candle fly, attracted by the bright lights, they continue to buzz around until they die, rather than get out in the small town or rural community where service is begging for help. And then

the question comes as to how the proper distribution of members of the medical profession is to be accomplished. In the first place there must be some radical changes in our medical education. There must be more practical men connected with the schools as teachers, men who know and have experienced conditions in the rural communities and men who have been able to meet them successfully; men who are able to teach otherwise than in terms of big hospitals, interns, and registered nurses; men who have some idea of the human body as a whole as well as theoretical knowledge about the enemies that attack it. And then pre-medical education must be broader and more comprehensive. The student applying for entrance to the medical school must be studied more as to his traits of character, his service soul, his vision for relations in our human economics, rather than his accuracy in answering the catechism of hypothetical and obsolete questions. The private practitioner must have vision and training and he must possess a missionary spirit.

The next step in bringing well-trained medical men to the rural communities is the development of the open community hospital. It must be multiplied by hundreds. Its development is the heart of the economic question. The people must be educated to this institution. The public must understand that the essentials may be had even in a five-bed as well as a five-hundred-bed hospital and that their physical safety is about as secure with a good general practitioner as it is with a multiplicity of specialists, and that financially they are much more secure.

These are some of the national problems of the medical profession. The solution of these is resting heavily upon the shoulders of the medical editors. The successful accomplishment of the task requires much new education of the profession and of the public. Public sentiment is the chief weapon of warfare in this accomplishment. To excite it to action will require the tact and the talent and the insight and the ingenuity of the medical editors as a unit.

The medical editor must ever keep square before his mind his individual problems, the chief of which is to see that his reading clientele is kept informed as to the latest and the best in modern medicine. A medical editor can hardly be expected to possess all this information, but he should have a fair idea where to find it. He should know the most able man available to write a symposium on a timely subject. The medical editor should be on guard against the unbaked paper that might be misleading to the casual reader, and if it is published, administer an antidote with a few tactful words in the editorial column. At the same time he should be cautious and considerate of the paper of the essayist who was asked to contribute for his own development rather than for value of his paper to others. A little start to some men

means a big finish in the end.

To sum it all up, the editor of a medical journal should be all things to all of his readers in order that the profession may be more efficient in its service to the public. There is no class of men upon whom opportunity is smiling so lavishly at this time and to whom duty is pleading so earnestly.

OFFICIAL PROGRAM

MISSISSIPPI STATE MEDICAL ASSOCIATION Vicksburg, May 13, 14, 15

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Executive Business

Meeting of Council and House of Delegates, Tuesday, May 13th, 8 a.m., Auditorium, Y. M. C. A.

Subsequent meetings will be arranged by the House.

Order of Business

1. Call to Order.
2. Roll Call.
3. Report of Secretary.
4. Report of Treasurer.
5. Report of Committees.
6. Unfinished Business.
7. New Business.
8. Report of Council.
9. Report of Nominating Committee.
10. Election of Officers.
11. Selection of Place of Next Meeting.
12. Reading and Approval of Minutes.
13. Adjournment.

General Meeting—First Day

Tuesday, May 13, 1930. Session 9:30 a.m. to 12 m; 1:30 p. m. to 6:00 p. m. Auditorium, Y. M. C. A.

Opening Exercises

1. Call to Order.....President H. A. Gamble, Greenville
2. Invocation.....Rabbi Sol Kory, Vicksburg
3. Report of Committee on Arrangements.

Section on Surgery

H. R. Shands, Chairman, Jackson

1. Treatment of Acute Peritonitis.....
.....R. D. Kirk, Jr., Tupelo
Discussion to be opened by J. F. Armstrong and C. C. Hightower.
2. Chairman's Address.....H. R. Shands, Jackson
3. Surgical Mortality: Its Meaning for the Operator.....Willard Bartlett, St. Louis
Discussion to be opened by John Darrington and J. P. Wall.

4. Amytal as An Anesthetic.....
.....C. T. Chamberlain, Jackson
Discussion to be opened by E. H. Galloway and E. E. Benoist.
5. Controllable Spinal Anesthesia.....
.....John C. Culley, Oxford
Discussion to be opened by M. J. Tendler and J. K. Avent.
6. Plastic Surgery About the Orbit.....
.....A. G. Wilde, Jackson
Discussion to be opened by S. W. Johnston and L. W. Long.
7. Carcinoma of the Rectum.....
.....W. E. Sistrunk, Dallas, Texas
Discussion to be opened by Geo. M. Street and S. H. Hairston.
8. Carcinoma of the Stomach.....A. Street, Vicksburg
Discussion to be opened by W. W. Crawford and Julius Crisler.
9. Fracture of the Femur.....F. H. Hagaman, Jackson
Discussion to be opened by J. S. Ullman and T. E. Ross, Jr.
10. The Diagnosis and Treatment of Ruptured Duodenal Ulcer.....Gilruth Darrington, Yazoo City
Discussion to be opened by S. W. Johnston and E. C. Parker.

Evening Session—Eight O'clock

Tuesday, May 13, 1930—Auditorium, Y. M. C. A., to which the public is cordially invited.

1. Invocation.....Rev. Gordon M. Reese, Vicksburg
2. Address of Welcome:
On behalf of the City of Vicksburg.....
.....Mayor W. J. Hossley
On Behalf of the Issaquena-Sharkey-Warren Medical Society.....Laurence J. Clark, Vicksburg
3. Response to Welcome Addresses.....
.....R. Curtis Smith, Drew
4. President's Address—"The Relation Existing Between Organized Medicine and the Public"
.....H. A. Gamble, Greenville
5. Annual Oration.....
.....J. Shelton Horsley, Richmond, Va.

General Meeting—Second Day

Wednesday, May 14, 1930—Session 9:00 a. m. to 12:30 p. m., Auditorium, Y. M. C. A.

Section on Hygiene and Public Health

Hardie R. Hays, Chairman, Jackson.

1. The Control of Venereal Diseases in Mississippi with Competent Treatment by the General Practitioner.....Hardie R. Hays, Jackson
Discussion to be opened by D. V. Galloway and J. H. Janney, Jr.
2. Flocculation Test for Syphilis: Its Value.....
.....T. W. Kemmerer, Jackson
Discussion to be opened by F. M. Smith and L. S. Lippincott.
3. Untulant Fever.....H. E. Hasseltine, U. S. Army
Discussion to be opened by F. J. Underwood and C. C. Applewhite.
4. Snake Bite.....Dudley Jackson, San Antonio, Tex.
Discussion to be opened by H. H. Johnston and W. A. Dearman.
5. Hookworm Disease and Infestation.....
.....Mr. C. A. Parmalee, Jackson
Discussion to be opened by D. J. Williams and

W. D. Beacham.

6. Full Time Health Work in Mississippi.....

.....F. J. Underwood, Jackson
Discussion to be opened by L. B. Austin and W.
W. Crawford.

Section on Eye, Ear, Nose and Throat

C. A. McWilliams, Chairman, Gulfport

Special Session, Auditorium Carnegie Library—Session
9:00 a.m. to 12:30 p. m., Wednesday, May 14, 1930.

1. Chairman's Address.....C. A. McWilliams, Gulfport

2. Tonsillectomy Hemorrhages.....
.....E. F. Howard, Vicksburg
Discussion to be opened by H. L. Arnold and W.
B. Dobson.

3. Protein Therapy in Ophthalmology.....
.....A. G. Wilde, Jackson
Discussion to be opened by H. M. Bell and L. S.
Gaudet.

4. Enucleation of the Eye With Glags Ball Im-
plantations.....E. C. Ellett, Memphis
Discussion to be opened by B. S. Guyton and D.
C. Montgomery.

5. Some Observations on Sinus Disease in Chil-
dren.....R. C. Lynch, New Orleans
Discussion to be opened by Edley H. Jones and
Robin Harris.

6. Gross and Microscopic Pathology in Chronic
Maxillary Sinus Disease.....Robin Harris, Jackson
Discussion to be opened by C. J. Edwards and
C. C. Buchanan.

7. The Common Cold in Ear, Nose and Throat
Practice.....D. W. Hamrick, Corinth
Discussion to be opened by G. W. Bounds and E.
L. Wilkins.

Section on Radiology

C. C. Hightower, Chairman, Hattiesburg

Second Floor Y. M. C. A., Session 3:00 p. m. to 6:00
p.m., Wednesday, May 14, 1930.

1. The Roentgen Diagnosis of Pulmonary Tuber-
culosis, with Especial Reference to Patholog-
ical Classification.....Geo. P. Sims, Gulfport
Discussion to be opened by Henry Boswell and
May F. Jones.

2. An Interesting Study in X-Rays, From Mem-
ory's Storehouse.....H. G. McCormick, Laurel
Discussion to be opened by R. W. Hall and J. Rice
Williams.

3. X-Ray Diagnosis of Gall Bladder Disease.....
.....Geo. M. Street, Vicksburg
Discussion to be opened by T. G. Hughes and
R. D. Sessions.

4. Duodenal Ulcer in Childhood.....
.....W. F. Henderson, New Orleans
Discussion to be opened by J. W. Gray and D. W.
Jones.

Section on Eye, Ear, Nose and Throat

C. A. McWilliams, Chairman, Gulfport

Auditorium, Y. M. C. A., Session 2:30 p. m. to 6:00
p. m., Wednesday, May 14, 1930.

1. Headaches of Nasal Origin.....
.....H. R. Fairfax, Brookhaven
Discussion to be opened by Geo. E. Adkins and
L. S. Gaudet.

2. Corneal Ulcers.....W. Lauch Hughes, Jackson
Discussion to be opened by B. S. Guyton and

A. G. Wilde.

Section on Medicine

G. Y. Gillespie, Jr., Chairman, Greenwood

1. Precordial Pain.....L. J. Clark, Vicksburg
Discussion to be opened by Henry Boswell and
A. H. Little.

2. Upper Left Abdominal Tumor Mass in Children,
and Some Points in Differential Diagnosis.....

.....S. L. Brister, Jr., Greenwood
Discussion to be opened by W. A. Dearman and
C. R. Stingily.

3. The Cardiac and Other Disabilities of Advanc-
ing Years.....Jas. S. McLester, Birmingham

4. Paranasal Sinus Disease in Children.....
.....J. D. Simmons, Gunnison
Discussion to be opened by F. G. Riley and Robin
Harris.

5. Colitis.....C. W. Patterson, Rosedale
(To be continued Thursday morning.)

General Meeting—Third Day

Thursday, May 15, 1930—Session begins 9:00 a. m.,
Auditorium, Y. M. C. A. (Section on Medicine, Contin-
ued.)

6. The Use of Whole Blood in Pediatric Work.....
.....N. C. Womack, Jackson
Discussion to be opened by D. W. Jones and Joe
E. Green.

7. Some Observations on Gastro-Intestinal Dis-
eases.....J. H. Musser, New Orleans

8. A New Foreign Protein Which May Be Used
Without the Usual Reaction.....
.....J. W. Gray, Clarksdale
Discussion to be opened by P. W. Roland and H.
A. Gamble.

9. Acidosis and Alkalosis.....G. L. Arrington, Meridian
Discussion to be opened by R. E. Wilson and R. C.
Bassinger.

10. Epidemic Cerebro-Spinal Meningitis.....
.....F. M. Acree, Greenville
Discussion to be opened by L. S. Lippincott and
H. C. Ricks.

11. A General Consideration of the Treatment
of Syphilis (lantern slides).....
.....C. M. Speck, New Albany
Discussion to be opened by F. L. Van Alstine and
T. E. Ross, Jr.

(Meeting of the House of Delegates.)

Woman's Auxiliary—Tuesday, May 13th

Registration at Y. M. C. A.

(Everyone is requested to register)

10:00 a.m.—Executive Board Meeting, Monroe Room,
Hotel Vicksburg.

4-5:30 p.m.—Saenger Theatre and Drive through
Vicksburg National Park.

5:30 p.m.—Tea at National Golf Course.

Wednesday, May 14th

9:30 a.m.-12:00—General Business Meeting, Coral
Room, Hotel Vicksburg.

12:30-2:00 p.m.—Boat ride, Mississippi River, Steam-
er George Miller.

Lunch.

2-5:30 p.m.—Saenger Theatre and Automobile Rides.

7:30 p.m.—Barbecue at Fort Nogales.

Thursday, May 15

9:00 a.m.—General Session, Coral Room, Hotel Vicks-

burg.

10:00 a.m.—Election of Officers.

Entertainment

An Eighteen-Hole Golf Tournament. All registered Physicians may participate. Score cards must be turned in by noon Wednesday.

Automobile Rides from 4 until 6 Tuesday and Wednesday afternoons.

Fishing. Eagle Lake and other places. (Write Dr. Edley H. Jones, Vicksburg, for arrangements.)

Steamboat Ride. Wednesday, 12:30 to 2:00. Water front. Lake Centennial. Mississippi River Bridge. Music and refreshments en route.

Barbecue Wednesday night, Fort Nogales. Menu includes fish, barbecued beef, mutton and pork, meat-ball, spaghetti, slaw, tomatoes, pickles, bread, iced-tea, lemonade, coca-cola.

Boxing and Wrestling Wednesday night following the barbecue.

MOVING PICTURES IN MEDICINE

To one acquainted with the history of medicine, the rapid development of pedagogic principles in undergraduate teaching has been a source of great interest and pleasure. We have rapidly divorced ourselves from the amphitheatre clinic and have brought the student into closer contact with the patient. While graduate teaching has lagged somewhat, yet, even here we are searching diligently for the means of imparting to those detached from medical centers the advances made in medical science, diagnosis, and treatment. This problem is a difficult one. In both groups the medical profession has eagerly seized upon any method that bids fair to increase the efficiency of teaching.

It was but natural that the moving picture should be utilized for this purpose. It was also but natural that the early films should be those designed to depict some personal operative procedure produced in an inadequate way by the physician himself. Such pictures have their limitations, but were the logical first step.

In the last few years the thinking teacher has realized that the moving picture presents great possibilities in illustrating certain principles of medical science in which it is advisable to combine in a succinct form anatomical structure and function, embryological development, physiological processes, etc. This method of teaching can be utilized to bring to the practitioner of medicine the newer developments of medical science, newer procedures in diagnosis and treatment, the anatomy, physiology, graphic presentations of symptomatology, and principles of treatment. It presents them in a way that is readily understood and remembered by the busy practitioner.

This phase of teaching is in its infancy. The addition of the talking voice in certain cases will add to the clarity of the presentation and serve to emphasize certain principles. The moving picture as such offers a great possibility for the dissemination of scientific knowledge, par-

ticularly if those producing them keep constantly in mind the principles upon which such films should be constructed. The essential criteria should always be, "Does the film teach sound, fundamental principles?"

At this stage, we should carefully avoid presenting controversial questions. If this be kept in mind and films are prepared to show the advances of medical science and are made available to the medical profession as a whole, it is probable that moving pictures will become one of the most valuable aids in the dissemination of medical knowledge. They can never replace the experience gained from personal contact with disease, nor can they supplant well established methods of teaching medicine; but as an adjunct to the present medical curriculum in schools and postgraduate study on the part of the practitioner, they should prove of inestimable value.

If such a method of medical instruction is to reach the highest level of efficiency, educational ideals and scientific accuracy must be maintained and photographic technique advanced constantly.—Editorial from *Surgery, Gynecology and Obstetrics*, May, 1930.

BREAST MILK A VARIABLE FOOD

The statistics of infant mortality show convincingly that breast feeding during the early months of life is an actual advantage to the child. Nutrition with mother's milk affords a better chance for survival in what has been termed "the perilous first year." A recent analysis of the death rates by causes of death discloses that the excess mortality among infants artificially fed was greatest from gastric and intestinal diseases, disturbances especially connected with improper feeding. Not only were the rates from gastric and intestinal diseases higher, but the rates from all the other principal causes appeared to be greater among the artificially fed than among the breast-fed infants. Among those artificially fed, the death rate from respiratory diseases averages 85 per cent higher than among breast-fed babies. All other values rate from two to five times greater in artificially fed than among breast-fed babies.

Many persons assume, on the basis of information like the foregoing regarding the baby who enjoys what Mrs. Rose has designated as "his inalienable right to nature's food supply—his own mother's milk," that the latter is necessarily a perfect food. The quantity and quality of the supply of milk depend in the human individual as in other species in no small measure on the physiologic well being of the lactating person. Hence a recent writer has properly designated breast milk as a variable food. This implies that it may fall short of being an adequate food, hence failing to meet all the needs of the baby. While death may not occur, growth and development may be far from optimal. Some of the reasons for this are made clearer

through the studies now being carried on by the staff of the Nutrition Research Laboratories of the Merrill-Palmer School and the Children's Hospital of Michigan in Detroit under the leadership of Dr. Icie G. Macy. These indicated through direct determinations how the quality of milk may vary from the standpoint of chemical constituents and biologic properties. A reduction in liquid intake, failure to empty the breasts completely at given intervals, and overwork have a tendency to lower quantity production.

There is sufficient evidence, as Macy and others point out, to justify the statement that breast milk from the same person may vary considerably from time to time, and that there are external factors operating which may markedly alter milk production, consequently influencing the quality and the quantity of the milk received by the infant. It is of interest, too, that milk from different women may vary and that this individuality in composition may persist throughout lactation and still allow for normal growth in the babies fed upon it. However, clinical experience as well as carefully controlled feeding tests in the nutrition laboratory indicate that breast milk is by no means always adequate in respect to the necessary vitamins. The latter factors are not formed *de novo* in the animal body but are derived from the intake; consequently the diet of the milk producer may markedly modify the biologic quality of the secretion from the mammary glands. In the Orient women with *beri-beri* produce milk deficient in vitamin B with the inevitable result of *beri beri* in their infants. These conditions are paralleled by animal experimentation. It has been pointed out of late in *THE JOURNAL* that the requirements of certain vitamins during pregnancy and lactation, with their drain on the maternal supply, are unexpectedly large; hence the need of an adequate dietary supply. A test of raw human milk obtained fresh daily from the Detroit Bureau of Wet Nursing and representative of the pooled milk of from ten to sixteen women on the average American dietary has demonstrated that, for experimental rats at least, human milk does not contain a demonstrable antirachitic factor, whereas cow's milk does possess a rickets-healing substance.

The lesson of the newer information is that due attention needs to be paid, perhaps, to an extent not heretofore properly realized, to the diet and environmental condition of the lactating mother so that she may better be enabled to produce satisfactory milk for the entire lactation period. The situation has well been summarized by Macy and others. Lack of satisfactory food, exercise, fresh air and sunshine, and a condition of constant mental and physical fatigue of the mother during the prenatal and postnatal periods may manifest their ill effects in various ways. If every healthy mother would make an untiring effort to suckle her young, in-

fant mortality would be greatly reduced. For the welfare of herself and her baby she should be as free as possible from overwork, undue anxiety, excitement and irregularity. In the selection of food it should be borne in mind that only a dietary well balanced in proteins, fats, carbohydrates, minerals and vitamins can satisfy all the demands of the body. Thus, the Detroit biochemists conclude, the tissues under such conditions may be prepared to elaborate a milk that is adequate in quantity and in which variation from the optimal in chemical and biologic properties is at a minimum.—From the *Journal of the American Medical Association*.

TO STAY

Whether or not machine milking has, as yet, been perfected to the point where milk can be drawn from the cow's udder, and thence be passed to the baby's bottle to be sealed without exposure, that is nevertheless the unalterable ideal toward which the industry must continually and steadfastly strive.

If equipments for this are, as yet, mechanically at fault, their faults must be corrected. If methods of handling these equipments are not now thoroughly effective, they must be improved until they are effective. If handlers of these equipments are not sufficiently careful in their handling, they must be made to mend their way. Nothing can stop development of such methods for handling milk. They must be perfected. They have come to stay.—Certified Milk.

AN OUTBREAK OF PSITTACOSIS

Report is made of an outbreak of psittacosis in which five out of eight persons coming in contact with a sick parrot had contracted the disease. The outstanding features seemed to be: (1) the high infectivity of the bird; (2) the absence of a single case of infection from a human being, and (3) the extreme severity of the illness. Two of the patients had symptoms suggestive of typhoid fever and three had lung symptoms.—Mary C. Radford—*The British Medical Journal*, 3607:333-334 (February) 1930.

NEW EXPERIENCES WITH THE PROPHYLACTIC VACCINATION AGAINST DIPHTHERIA

Pockels, W.—*6 Deutsche Medizinische Wochenschrift*
56:48-50 (January 10) 1930

The morbidity and mortality of diphtheria have increased in the past 2 years. In 1928, Berlin had 5,910 cases of diphtheria, 550 of which were fatal. According to Seligmann, many of the 100,000 children who have been

A black and white photograph showing a close-up of a dark, textured surface, likely a piece of machinery or a large book. The surface is covered with numerous small, light-colored, circular or oval shapes arranged in rows. These shapes appear to be rivets, bolts, or small components. The lighting is dramatic, with strong highlights on the light-colored shapes and deep shadows in the surrounding areas, creating a high-contrast, almost abstract composition. The overall effect is one of industrial precision and repetition.

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VOLUME 7

BOONEVILLE, MISS., JUNE, 1930

NUMBER 12

THE N.Y. ACADEMY
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THE EASY JOB BY EDGAR A. GUEST

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It doesn't take pains or original wit.

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If the job's easy dullards can do it.

It doesn't take thought and it doesn't take time,
If it is easily wrought it is sold for a dime,

If unimpeded, you placidly view it.
Skill isn't needed, a dullard can do it.

So you, though you sigh, as a hard task you meet,
It's the odds you defy that make victory sweet.

It's the dreary up-hilling and doubt till it's ended
That make the task thrilling and make the prize splendid.

If to succeed doesn't call for your best,
If in the deed of your strength there's no test,

If care isn't present and grief added to it,
The task is too pleasant and dullards can do it.

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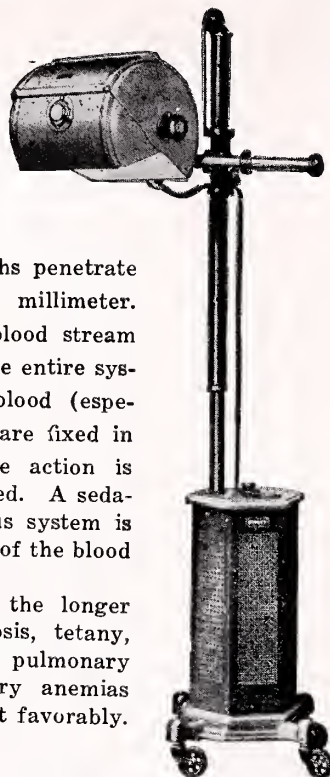
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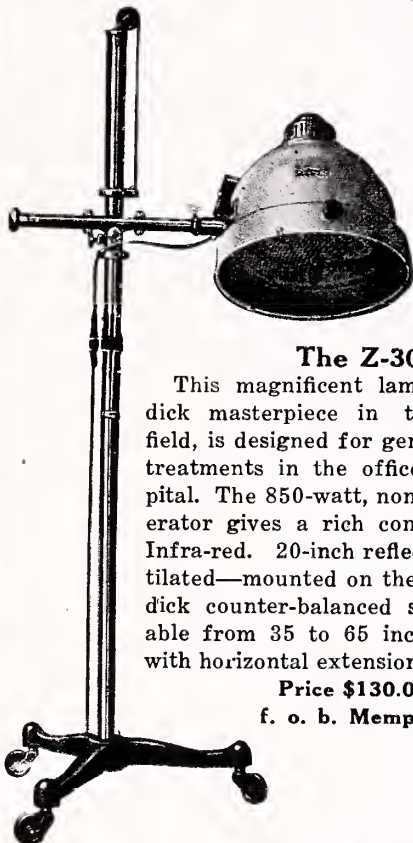
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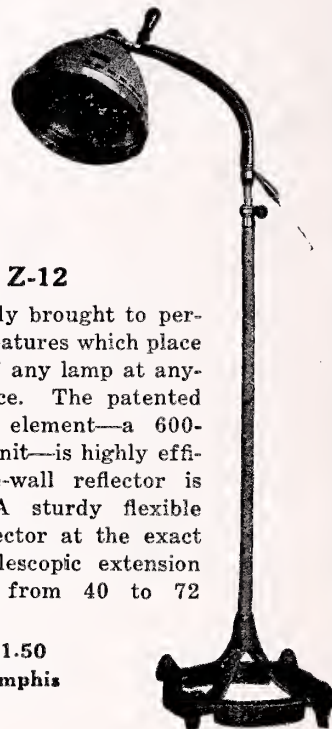
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OFFICIAL ORGAN OF THE NORTHEAST

MISSISSIPPI MEDICAL SOCIETY

Booneville, Miss., 114 Main St.

W. H. ANDERSON, M.D., Editor and Manager

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The state meeting at Vicksburg was not as well attended as it should have been, but a splendid program was offered and a most royal entertainment was given by the local physicians. It is hard to find any place which can do it like Vicksburg.

Dr. E. F. Howard is the newly elected president of the Mississippi State Medical Association. For many years Dr. Howard served as secretary of the state association, and served very efficiently. He has given lots of time and has done his part well for organized medicine. This, the highest honor within the gift of the association, is well deserved by him. We predict one of the best meetings next year in the history of the association under his direction.

Our next state meeting will be held at Jackson, the State Capital. We always have our best attendance there. It is nearer the center and everyone feels an interest in this town.

We thank Dr. Bethea and associates for their splendid paper on Typhus Fever. When you get anything from Dr. Bethea you get the best.

You will note the new ad of American Surgical Supplies, Inc. We appreciate the ad from this company and we trust that you will give them due consideration along with our other advertisers. We have to depend upon our advertisers mainly for financing the publication of our journal and we thank all of them.

Our efficient secretary has a fine program for our June meeting at Houston. You will be royally entertained by this town. It is the Vicksburg of our association.

President Gamble's address on organized medicine was very able and should be studied and his advice and admonition carried out. On organized medicine, Dr. Gamble can speak with a great deal of authority.

You will enjoy and should be greatly profited by the fine paper of Percy Toombs to the nurses of Houston. Dr. Toombs has a master mind and he is a fluent speaker or writer.

You will read with interest the paper by Chief Surgeon Webb on Fractures.

Be sure to read the full page ad of Dr. Spivack, "Actual Practice in Surgical Technique." We appreciate this ad.

The Southern Railway Surgeons met in Chattanooga on June 10-12. Dr. Denegre Martin was president. He is a splendid presiding officer as well as one of the ablest surgeons of the South. In surgery he is the salt of the earth. He is honest to the core and keeps his mind wide open to the truth. He is actuated by the spirit of service. At the meeting Chief Surgeon Applegate was presented with a Ford sedan, one of the most officious and flirtatiously dressed up Elizabeths that Henry has ever

graduated. Dr. Applegate has a strong place in the hearts of the surgeons of the Southern Railway System and deservedly so. He is big hearted and fine spirited. The next meeting will be held in Washington, D. C. Dr. Dunbar Newell of Chattanooga is the new president. He will serve with dignity and efficiency. He is an able surgeon, one of the best fracture men we have in the south, and he is versatile and courteous.

You will note the ad of Harold H. Clapp. It seems that these foods will prove a wonderful help to the physician and still greater service to the children, especially the ones in the city. And no one thing is of greater importance than starting the child off with shoes that fit—ones that do not deform the foot.

Again the legislature adjourns and there is no provision made for the small hospitals of the state. Some blame it on the governor, some on the legislature, and perhaps both are right. The charity board proposed by the governor was far ahead of anything that has been offered in Mississippi for the medical relief of the poor and for the advancement of the small hospitals of the state, provided its control had been placed beyond that of the governor, not the present one any more than the future. One of the outstanding problems of America is to bring modern medicine to the masses at a cost at which it can be utilized. If this is to be done the small community hospital is to be the means by which it is to be accomplished. Mississippi is especially suited to take the lead in this matter. The hard working country people in the rural districts of this state who have paid taxes for all these years have a right to help care for their unfortunate poor, the same as Jackson, Meridian, Vicksburg, Natchez, and Laurel, for which three hundred thousand dollars was provided. You say that all have access to those institutions. Yes, they do, and when you think that all can go to those hospitals you display the densest ignorance of medical problems that it is possible to tolerate in the human brain. The poor people have no money to pay railroad fare to a hospital two hundred miles away. They do not have the time to get there in a big per cent of the cases. In the dark hour of serious and fatal sickness any man or woman wants to have a loved one near. They have a right to this. These five charity hospitals may be all right, but in reality they are only local. They are not reaching and serving the state. The three hundred thousand dollars means, in round numbers, three and a half thousand to the county. If this amount was placed in the small hospitals the real charity of the state could be cared for very well and in this way it would reach hundreds of poor farmers who have never known in this state what it was to have a little help in time of sickness. It does not take any big stretch of the imagination to see the econ-

omy in this proposition. We really need no state-owned and state-operated hospitals. The medical profession is willing to take care of the actual charity in his clientele and do it without any compensation, provided the hospital expenses are paid. The average physician or surgeon is better satisfied to do this than he is to send the patient miles away to one of the state hospitals. The patient is better satisfied. The expense of transportation is saved. Many lives are saved that would be lost if the sick person is sent a distance. The state saves the construction and upkeep of buildings. Just a few hundred dollars to the small community hospital to take care of the charity means the difference between life and death sometimes to the little, but important institution. If the small hospital is kept alive, a medical group, doctor, nurse, dentist and pharmacist may be kept in the small town and the people be served medically. Otherwise conditions are to be distressing in this country. The cities are crowded now. Poor medical advantages are largely responsible for the small town and rural community being deserted. We have a serious problem before us. We had better make it our problem. We had better know how our representatives and how our governor stands next time. The small hospital has been shamefully treated and some one, some many, are to blame.—Booneville Independent.

TYPHUS FEVER IN LOUISIANA WITH REPORT OF CASE

OSCAR W. BETHEA, M.D.,
HERBERT E. CANNON, M.D.,

and

I. A. ROBINS, Jr., M.D.,
New Orleans

The first case of Typhus Exanthematicus to be diagnosed in this State was by Dr. William Colby Rucker. (1) This case was typical of the mild endemic form of typhus fever and was definitely proven by his agglutination for B. Proteus X-19 in a dilution of 1-640. (Weil-Felix Reaction).

The second case reported was by Dr. J. H. Musser (2) It showed a complete agglutination up to 1-160 with a partial agglutination up to 1-320. This case also was typical of the endemic form of the disease.

We are reporting what we think is the third authentically proven case of typhus fever in Louisiana.

CASE REPORT

T. L., white male, a laborer, aged 28 years, a resident of New Orleans, was admitted to Ward 222 at Charity Hospital, on August 30th, 1929, with a tentative diagnosis of acute bronchitis, and probable early typhoid fever.

CHIEF COMPLAINT: Fever, cough, headache, and weakness.

PRESENT ILLNESS: He had been working steadily as a carpenter until August 25th, when

he noticed that he was beginning to have fever and to feel weak. He took his temperature, which was 102 3-5 degrees F., so he went to bed and treated himself, not thinking his illness justified his sending for a physician. During this time he had several "chills" daily, each lasting from one-half to one hour. He had a slight cough with a moderate production of mucous secretion; also, he had a persistent frontal headache which was not relieved by self medication. There were no cardiac symptoms. The appetite was good. There was no qualitative dyspepsia. Intestinal elimination was normal; the dejecta was of normal color and consistency. There were no urinary symptoms.

PAST MEDICAL HISTORY: The patient claims that he had been sick only twice; that is, when he had measles and whooping cough. Otherwise, his health had been excellent.

FAMILY HISTORY: His wife is well; no children. Three sisters and one brother are well.

SOCIAL HISTORY: He has been a carpenter for several years. His living conditions are good. He has not been out of Louisiana for several years and he does not think that he has been around anyone ill during the past few months. He has had regular meals. He drinks "tap water." No one in his neighborhood has been ill with fever.

PHYSICAL EXAMINATION: (Abstracted) The examination of the patient reveals a well developed and well-nourished white male, lying quietly in bed, mentally alert, but feverish and apparently acutely ill.

Eyes—Conjunctiva, both palpebrae and sclerae injected. The pupils are regular and equal, reacting to light and accommodation.

Mouth—The oral hygiene is poor. Numerous carious teeth are present. The tongue is coated and tremulous. The mucosa of the pharynx is injected.

Chest—Well developed. Expansion is good and symmetrical. Sibilant and conorous rales are heard over both lungs. They are transient and heard mostly over the bases.

Heart—The sounds are regular in rate, rhythm, and volume. B. P. 114-68. Pulse 88.

Abdomen—The abdomen is somewhat distended, tympanitic, and slightly tender all over, especially so in the right lower quadrant. Hyperperistalsis is noted. The spleen is palpable about 3 cm. below the costal border. It is smooth, soft, and tender; the edge is smooth. The liver is not palpable.

Extremities—The patellar tendon reflexes are slightly increased; otherwise they are negative.

PROGRESS NOTES

8-30-29. Admitted to Ward 222 with provisional diagnosis of acute bronchitis and probable early typhoid fever. History is suggestive. Essential points in examination are conjunctivitis, injected pharynx, coated, tremulous tongue, evidence of bronchitis, palpable spleen, slightly distended and tender abdomen. These

findings, together with a temperature of 104 2-5 degrees F., and a relatively slow pulse (92) and a respiratory rate of 28, are suggestive of typhoid. Blood count made; blood obtained for Wassermann, Widal, and culture. Treated symptomatically.

8-31-29. Had chill today (15 min.) followed by marked diaphoresis.

9-2-29. Slight chill last night, lasted 5 min. Patient's temperature continues elevated (104 degrees F.) with a relatively slow pulse (86). This A. M. numerous pinkish-red macules appeared on the chest, abdomen and inner surfaces of the thighs; these apparently fading on pressure. Most of the macules were grouped, but some occurred singly. The lesions resemble the "rose spots" of typhoid. Some of the supposed rose spots were scraped vigorously and the scrapings were planted on ox-bile.

9-3-29. More macules have appeared on the abdomen and chest both anteriorly and posteriorly; thighs, arms, and even on the face and neck. The lesions are now suggestive of typhus fever. Patient sleeps much in the day time.

9-4-29. The macular eruption now covers the entire body; numerous macules are present on the arms, forearms, thighs, and legs, face and neck, but are more numerous on the chest and abdomen. The macules are becoming more erythematous and some no longer fade on pressure; some are confluent and are elevated above the skin. New crops are appearing.

9-5-29. The macular eruption is still present, though the lesions are less numerous on the face and neck.

9-7-29. The eruption is rapidly disappearing. Macules are no longer present on the face, neck, or extremities. The temperature is falling by slow lysis.

9-9-29. The eruption has completely disappeared. The temperature became normal today.

9-10-29. The patient has been feeling exceptionally well, but today for the first time he felt nauseated and vomited this morning. Put on liquid diet.

9-11-29. Patient nourished well today.

9-12-29. The spleen has been decreasing in size. Today it is no longer palpable. After being normal for two days the temperature rose to 101 degrees F., after he had eaten much cake. A purgative relieved him, so apparently the rise was due to intestinal toxemia.

9-14-29. Condition fine. Appetite ravenous.

9-16-29. Feels fine. Sits up in bed.

9-19-29. Patient able to be about ward. Slightly weak.

9-24-29. Gaining strength rapidly. Has gained eight pounds since admission.

9-27-29. Patient wishes to go home. Has been practically free from fever since 9-12-29. Condition good. No complaints. Discharged.

LABORATORY REPORT

Blood counts:

Total red cells 8-30-29, 5,000,000; 9-1-29, 4,800,000; 9-7-29, 4,200,000; 9-20-29, 4,415,000;

9-27-29, 4,545,000.

Total white cells 8-30-29, 10,000; 9-1-29, 13,750; 9-7-29, 11,250; 9-20-29, 7,500; 9-27-29, 7,750.

Hemoglobin (Talquist) 8-30-29, 65 per cent.; 9-1-29, 75 per cent.; 9-7-29, 70 per cent.; 9-20-29, 70 per cent.; 9-27-29, 70 per cent.

Small Mononuclears 8-30-29, 22 per cent.; 9-1-29, 33 per cent.; 9-7-29, 30 per cent.; 9-20-29, 26 per cent.; 9-27-29, 28 per cent.

Large Mononuclears 8-30-29, 2 per cent.; 9-1-29, 1 per cent.; 9-7-29, 2 per cent.; 9-20-29, 2 per cent.; 9-27-29, 3 per cent.

Eosinophiles 8-30-29, 1 per cent.; 9-1-30, none; 9-7-29, 1 per cent.; 9-20-29, none; 9-27-29, none.

Polymorphonuclears 8-30-29, 75 per cent.; 9-1-29, 66 per cent.; 9-7-29, 67 per cent.; 9-20-29, 72 per cent.; 9-27-29, 69 per cent.

Pathogenic cells, none.

Plasmodia, none.

Urine analysis entire negative on 8-31-29, 9-21-29, and 9-25-29. Feces negative for ova, larvae and cysts.

SEROLOGY. 9-1-29, Wassermann negative.

9-3-29. Agglutination negative for B typhosus, Para A, and Para B, at end of one hour in dilutions of 1-50; 1-100; 1-200.

9-5-29. Agglutination positive for B. proteus X-19 in dilutions up to 1-200.

9-7-29. Agglutination positive for B proteus X-19 in dilutions up to 1-620.

Agglutination negative for B. typhosus, Para A and Para B at end of one hour in dilutions of 1-50, 1-100, 1-200.

9-10-29. Septic blood culture (obtained on 9-3-29) no growth. Typhoid blood cultures (obtained on 9-3-29) no growth.

9-12-29. Feces culture (obtained on 9-3-29) negative for B. typhosus. Urine culture (obtained on 9-3-29) negative for B. typhosus. Scrapings from lesions (on 9-3-29) negative for B. typhosus.

9-16-29. Septic blood cultures (obtained on 9-6-29) shows no growth. Septic blood cultures (obtained on 9-11-29) shows no growth. Typhoid blood cultures (obtained on 9-11-29) shows no growth.

9-25-29. van den Bergh. Direct—negative. Indirect—very faint trace.

Icterus Index. 4 units.

BLOOD CHEMISTRY:

Nonprotein nitrogen, 40 mgm. per 100 cc. blood.

Urea nitrogen, 20 mgm. per 100 cc. blood.

Creatinine, 1.5 mgm. per 100 cc. blood.

Uric acid, 2.5 mgm. per 100 cc. blood.

Blood sugar, 63.5 mgm. per 100 cc. blood.

ELECTROCARDIOGRAPHIC REPORT:

Slight tendency to a right ventricular pre-dominance P. R. interval 0.19 sec. to 0.20 sec. Slightly delayed A.V conduction.

COMMENT: The typhus fever observed in Louisiana has been of the mild endemic type and is quite different from that described in the average text book. and except for the rash and the agglutination test it could not be differenti-

ated from typhoid fever.

Our case was characterized by an absence of a history of a source of infection, a generalized eruption, the absence of mental or neuropathic symptoms, a palpable spleen, a relatively slow pulse (96) even though the temperature reached 105 degrees F., and a positive Weil-Felix reaction in dilutions up to 1-620.

(1) Rucker, W. C.: Mild Typhus Exanthematicus, With Report of Case, New Orleans Medical & Surgical Journal, 82:177-179, September 1929.

(2) Musser, J. H.: Typhus Fever in Louisiana, A Case Report, New Orleans Medical & Surgical Journal, 82:472-474, January 1930.

THE FRACTURE PROBLEM ON RAILROADS

R. C. WEBB, M.D.,

Chief Surgeon, Great Northern Railway
Minneapolis, Minn.

There are five hundred twenty-five railroads in this country operating three hundred twenty-five thousand miles of road. The roads having a gross income of one million dollars or more are listed as Class one railroads and of these there are approximately one hundred eighty.

The records of the Interstate Commerce Commission for 1928 show that damage to railway property in train accidents for that year was slightly below twenty million dollars. There were seventeen thousand accidents producing this twenty million dollar property loss. Six million dollars of this damage to railway property was caused by five thousand five hundred accidents which were found to be due to the negligence of employees.

It is interesting to contemplate the loss due to the negligence of employees as compared to the total loss and to estimate how many of the cases of negligence are due to employees with impaired health and how many are due to other causes.

There were five thousand other train accidents causing six million dollars of loss in which the human element was a possible factor.

By these figures one has concrete evidence of the importance of eliminating train accidents by careful selection of employees and continued observation of them by operating officials. Medical examinations of entrants to service and re-examinations of those in service will eliminate many accidents due to impaired health and there is a possible saving here of several million dollars each year.

In 1928 there were slightly less than seventy thousand reportable injuries to employees on duty and of these all but four per cent occurred on Class 1 roads. The annual cost to railroads charged to injuries to persons in 1928 was twice that of damage to railway property or about forty-one million dollars.

Among twenty-two thousand eight hundred

train and train service injuries there were five thousand three hundred fractures. There were forty-three thousand eight hundred non-train injuries and these were not classified and for that reason the number of fractures is not given and can only be guessed at for the present.

Twelve hundred forty-three employees were killed on duty and there were four hundred twenty-two major amputations. The cost of these cases might be guessed at as about sixteen million dollars.

If we estimate the total number of fractures at ten thousand and place their average cost at one thousand dollars we have a fracture cost of ten million dollars and it is probable that this cost is nearer to twenty million dollars.

Totaling the cost of the killed, the amputations, and the fractures, it is probably over thirty-five million dollars leaving five million dollars for minor and miscellaneous injuries.

However, correct these estimates of the cost of injuries may be, it is certain that the cost of fractures is very great and is greater than any other class of injuries. It is quite possible that the annual cost of fractures may equal the entire annual cost of damage to railway property in train accidents.

The cost of fractures thus estimated may be translated to any railroad as being equal to the annual reportable property damage from train accidents or equal to one-half the annual cost of injuries to persons. A sum of this magnitude is of interest to any railroad and the question which immediately arises is as to how this expense can be reduced.

There are three ways which immediately present themselves for keeping down and reducing further the cost of fractures. The careful selection of new employees and the periodic examination of old employees as now carried on by many railroads is an important factor of great but obviously intangible value. The constant activity and watchfulness of the safety department is a second important factor. The third factor, which is one on which we can definitely lay our fingers, is that of improving the treatment of the patient who has received a fractured bone and thereby reducing not only the great economic loss but also effecting a great humanitarian benefit.

The great economic loss from fractures and its possible reduction has been recognized by the American College of Surgeons and a special committee has been appointed and is actively engaged in an attack on this great problem. The American Medical Association has a committee which is similarly engaged and conducts an annual exhibit consisting of several booths at the annual meeting and in each booth one phase of this problem is presented for the education of physicians attending the annual conventions. The College of Surgeons is preparing a standardized primer on the treatment of the more common fractures in order to prevent cer-

tain errors which are now occurring. The insurance companies underwriters association are making an annual contribution to the College of Surgeons for furthering this study.

Railroads have many advantages in attacking this problem. They are in the habit of spending money to save money, and proper close attention to this problem will save money. Their employees are a very intelligent group and can be instructed to do their part. The definite number of employees is known and the area of country covered is known. An organized safety department is already in operation to carry on the necessary instructions of these employees in this territory. An organized claim department is in operation and prepared to give assistance in following the injured employees into the proper institutions and seeing that they are placed in proper and approved surgical care. A known list of hospitals to which the employee may be taken is in their possession. They nearly all have a definite surgical organization with a chief surgeon and a definite group of surgeons who are previously known as the surgeons who must be prepared to receive and care for these fractures.

With the above outlined armamentarium this problem should be attacked in the following outlined manner and continuous attention should be given to it until we are certain that unnecessary losses are being prevented and that the railway employees are made to realize that after receiving a fractured bone that they are better off in the hands of the surgical department of a railroad than they would be in the hands of surgeons representing their advisers from outside sources.

FIRST AID

The importance of good first aid to the employees with a fractured arm or leg should be well understood by everyone connected with a railroad and having understood it they should be taught how to apply good first aid in fractures.

Good rapid healing of broken bones is known to be desirable and for first aid purposes it should be understood that this healing is absolutely dependent on the condition of the flesh surrounding the broken bone and therefore the broken limb should be carefully splinted and gently handled and proper treatment should be started at once.

The private soldiers in the last war were taught the importance of good first aid and were able to apply it, and for that reason it should be extremely easy to teach it to the intelligent employees of railroads.

At certain points on the railroad where injuries may occur more frequently and where first aid work may become more highly specialized, there should be a Thomas splint and a man instructed in its proper application. At all other points where first aid cabinets are in use, there should be a half dozen simple wooden splints of proper length to be useful in a frac-

ture of the arm or leg or thigh.

A framed cardboard poster with illustrations of the type found in the American Red Cross First Aid Manual and of the type shown in the fracture exhibit of the American Medical Association should be prepared by one of our railway surgical associations and placed beside all first aid cabinets.

An annual first aid demonstration and lecture should be presented by the nearest local surgeon to the employees nearby each first aid cabinet. This lecture might be prepared for the surgeon. A moving picture illustrating first aid to fracture cases would be the most useful in our safety demonstration cars..

TRANSPORTATION OF FRACTURE CASES

Fractures of the lower extremity should be transported on a proper stretcher which should be obtainable at certain points on the railroad and when a stretcher is not available a car door or other flat surfaced substitute should be used. If a proper carrier is not available the patient should be left where he is until one can be sent for and brought to him.

HOSPITALS

Railroads have the advantage of knowing the exact hospitals to which their cases are to be taken.

The standardization of hospitals is now practically complete and as a result of this service rendered by the American College of Surgeons nearly all the hospitals in this country have improved themselves and are safer places for surgical patients.

A minimum standard of equipment of hospitals accepting traumatic cases has been determined upon and sooner or later the College of Surgeons will furnish us a list of these hospitals and we will then know whether or not the hospitals receiving our fracture cases have met this standard.

Inasmuch as the minimum standard of equipment has been agreed upon as necessary to the proper treatment of fractures and other traumatic surgical cases to bring about the speediest return to duty with a minimum amount of permanent disability the railroads are interested in having their hospitals have this equipment and having their surgeons learn to use it because it means a saving of enormous sums of money each year and in the course of a few years these sums could become large enough to build many institutions.

Proper x-ray apparatus, including portable x-ray units, proper fracture beds, proper overhead frames for traction and suspension, proper supply of standardized splints and other supplies for the treatment of fractures should be agreed upon and measures placed in operation to assure us that they are always available for our cases. These are methods of reducing the large expense of our fracture cases and the railroads are interested. They are also interested in having additional approved valuable aids added to this equipment as they appear from

time to time.

STANDARDIZATION OF X-RAY WORK

Poor and inadequate x-ray work is a very definite large source of extra expense in railroad fracture cases. The claim departments and the legal departments are too often confronted by the plaintiff's attorney with properly taken x-ray views which show the condition which they should have known of previously and which the surgical department failed to find. They know the extra amounts which they have to pay and they hope it won't happen again, and it usually doesn't in that locality. We should have an accepted method which will reduce such mistakes to a minimum in any locality under our supervision.

We can adopt a minimal standard set of directions for x-ray work applicable to every part of the skeleton. This should include the name of the part, the amount to be properly included, the views required, the size of the films, the use of a bucky diaphragm, the need for stereoscopic views, certain special directions describing the needs from a surgical diagnostic standpoint and we might as well include the fee which we will allow for such a properly carried out service.

As long as our x-ray work is done by exclusive specialists in Roentgenology we must give directions for guidance of technicians and surgeons who operate their own x-ray machines.

Every fracture should have an x-ray before and after reduction and these properly taken x-rays should be immediately sent to the chief surgeon's office for the making of a record for the file in the claim department and for such advice as to treatment which the chief surgeon may wish to give the local surgeon. Furthermore, this will insure the company that the x-rays are being taken according to directions and in addition we all know that it is only natural to put a little extra effort into your work and show your best possible reduction if your x-rays are going to be reviewed by another surgeon.

SPECIAL FRACTURE REPORT BLANKS

Special fracture report blanks have been prepared by the College of Surgeons for the proper recording of fractures in standardized hospitals. To properly fill out one of these blanks one has to study his fracture case a little more and he also puts himself on record as to the hours and dates and manner of treatment.

I believe that in view of the expense connected with fractures that railroads should have a special blank and should be most meticulous in their demands that such a blank be properly filled out and two copies sent in to the chief surgeon's office. One of these copies should be sent on to the claim department for record purposes and the other copy should be retained by the chief surgeon for record purposes and to enable him to forward any advice he may wish to give.

The proper diagnosis, the statement that an early reduction of the fracture was accomplished

ed, and a statement of the treatment given and the treatment to be given should be furnished to the chief surgeon and a copy should be in the claim department files.

STATISTICS

From the regular reports which are made up each month detailing amounts paid employees, the fracture cases might be made up into a separate report which stated the exact diagnosis of the fracture in each case. Thus an accurate list of the fractures and the expense involved would be supplied. At the end of each year these could be re-arranged and grouped according to diagnosis. This would afford statistics showing the expense of certain types of fractures. It would afford information as to the place where the fractures occurred, the hospitals to which they were taken, the surgeons who treated them. The fracture reports could be gotten together and compared with these reports. Such a compilation would be of immense value to the chief surgeon in his efforts to place his finger on the types of injuries which needed attention particularly, and he could know where to direct his efforts toward correction of defects in our system of care and treatment of these fractures.

It is perhaps not well to average the costs of each type of fracture and present them at our annual association meetings, but we could present our statistics of certain types of fractures each year and consider such standardized improvements as may seem proper to present to our surgeons.

Statistics of this character would be useful to other surgical groups and would be useful to medical teachers who wish to prepare the railroad surgeons of the future.

EDUCATION OF THE RAILWAY SURGEONS

There has always been a system of appointing the best doctor in the community as the railway surgeon when a new appointment is made. The railway surgeon must always be a general surgeon because although broken bones are the greatest single problem, they are usually complicated by general problems and the surgeon in charge must be a general surgeon.

The medical school teaching of fractures is grossly inadequate at present and probably will remain so because there is lack of room for proper teaching in the medical school curriculum.

The one-year general hospital internship again is inadequate to prepare a doctor for the care of a fracture within such an organization as should exist on a railroad.

In the course of practice some doctors become proficient in the care of fractures and some do not. It behooves the surgical organization on a railroad to become acquainted with the capabilities of the surgeons.

In view of the fact, however, that fracture treatment should be started immediately in nearly all cases, we must endeavor to keep our surgeons informed of the methods at present ac-

cepted as the best. The outline adopted in 1927 at Richmond is at present the best and is soon to be replaced by the primer prepared by the College of Surgeons. The principles described in these booklets should be illustrated and emphasized by appropriate speakers at our annual meetings of our local surgeons. The statistics obtained from our annual reports should serve as a guide as to which subjects are especially in need of attention at these meetings.

CENTRALIZATION OF FRACTURES

The centralization of fractures for treatment presents a very variable problem because of the physical conditions existing on the various railway systems. In sparsely settled regions active treatment must be begun at once because the patient may be twelve hours or more from the more desirable surgeon. In closely settled regions where train service is ideal it might be possible to transport all cases to the chief surgeon.

There are certain types of fractures which are considered bad fractures by the laity and every effort will be made to transport such cases to some surgeon with a wide reputation and this is inevitable although it might be best to leave this case where he is for the application of the necessary simple treatment.

Other cases can only be found to be really cases requiring centralization when the records and x-rays are reviewed by the chief surgeon. They might not appear bad to the layman, but might be cases in which great possibilities of permanent disability existed unless some operative procedure is applied such as is required in fractures of the radial head with displacement.

A working plan for centralization of fractures might begin with the division of fractures into the following groups: First, those fractures which can be properly treated by local surgeons with reasonably satisfactory results. Second, those fractures which will have unsatisfactory results unless placed in the care of surgeons equipped to give special treatment. Third, those fractures which will have unsatisfactory results regardless of the ability of the surgeons.

CONCLUSIONS

The fracture problem in the United States and throughout the world is assuming an important position along with cancer and tuberculosis and other sources of national economical losses. It probably will not be long before a campaign will be carried to the laity to instruct them as to how they may help to reduce the suffering and losses due to fractures. The railroad surgeons of the United States could do a great deal to obviate the necessity for such a campaign and will in the meantime effect an annual saving to the railroads of from one to five million dollars over present costs.

"A large proportion—probably nine-tenths—of all simple pleurisies are of tuberculous origin."

HIGHER IDEALS

(Address of Dr. Percy Toombs, Professor of Obstetrics, University of Tennessee School of Medicine, delivered at commencement exercises of Houston Hospital Training School for Nurses at Methodist Church, Houston, Mississippi, May 25, 1930.)

It is my first and most agreeable duty to express my profound appreciation of the honor conferred upon me by the invitation to address you on this notable occasion; also my gratification at the opportunity and the privilege of addressing an audience in my native state, in which I have the good fortune to count my personal friends, some of which I have the joy of recognizing as my contemporaries, and others who in the course of my professional life have honored me with their confidence and good-will.

To these worthy friends and colleagues I am still further indebted for the privilege of a large acquaintance with the people of Mississippi—an acquaintance which in the course of years has been the prolific source of many professional relations which have ripened into lasting and loyal friendships—friendships that have proven one of the greatest rewards and blessings of an arduous professional life. I avail myself, therefore, of the opportunity offered me by your friendship and your goodness to thank you, and again, through you, to express my admiration, my devotion and my love for the splendid people—the generous, the brave and the chivalrous people—of this great commonwealth, with whom my life has been so closely and delightfully interwoven, from the earliest dawn of my existence to the present time.

It would have been my greatest ambition to have come to you with some offering worthy of the splendid occasion; to have brought some message that would have fitly memorialized the day, and that would have adequately conveyed to you the sentiment of grateful recognition that so many years of close intercommunication has fostered and nourished in my heart; but it is not easy for the busy worker in our profession, the man who is eternally at the forge, hammering away at the physical imperfections of his fellows, shaping, in a manner, their physical destinies, and sweltering over the melting pot of human injury and disease, to suddenly change the modest appeal and the grim activities of the operating room for the toga of the orator and the graces of the forum.

Fortunately, even though I possessed a single claim to the many virtues that my distinguished friend, your gifted but too partial chairman, has showered upon me, the impossible is not expected of me. Even were I capable of oratorical display, any attempt at such an exhibition—in the land of Prentiss, Davis, Williams, Lamar, and a host of others, living and dead, who have shed lustre upon the glorious traditions of your state, a state where, seemingly, wit and

eloquence spring from the soil as plentifully and spontaneously as the cypress and the pine—any attempt, I repeat, to contribute to the amenities of this occasion by a display of oratorical power would not only be “bringing coals to Newcastle,” but would prove an utter failure.

The day on which one is welcomed into fellowship with the free and courageous souls of that “noble type who live not for self alone, but for the good of all,” is a red letter day in one’s life, and to stand in this presence and witness the enthusiasm and devotion of women to the care of human life is to become imbued with hope and faith, and to be made stronger and fresher to battle for the amelioration of the suffering and the prolongation of human life.

I know of no more influential women, in certain particulars, than those of your calling; not that you exert the kind of influence which merits the reward of newspaper notoriety, but that higher and worthier personal influence which makes its impress on the lives and conduct of those with whom you come in contact, and receive its reward from the lips of Him who will say to you at the end of your journey, “Inasmuch as ye did it unto one of the least of these, ye did it unto Me.” I have not come to flatter you, nor is it my intention primarily to criticize; however, frank though none the less kindly criticism will form an important part of my remarks. I shall ask your indulgence for a brief while for a discussion of some of the higher ideals of your profession: The nurse’s relation to her Alumnae Association, the relation between nurse and physician, the nurse’s duty to herself, the nurse’s duty to her patient.

Every nurse should join an association of some kind. In this way as in no other can there be formed and perpetuated a kindly feeling of interdependence and good will among you. In this way only can there be maintained a standard of ethics, without which any vocation is a failure. The association should be formed and its dignity asserted and preserved, and every member loyal and comply with its rules. Its officers should be chosen for their fitness and not because of popularity. Remember that each individual member has a voice and a vote, and therefore, if one member appears to rule, it is not the fault of the member, but of those who submit to such ruling. If one person has more influence or does more than another it is for one of three reasons: Either that person is the only one who can do such things, or she is the only one who will do them, or she has a desire to rule and is permitted to do so by the silence of the rest of the body. In the words of the Apostle, “As far as in you lies live peaceably one with the other.” Your association should never hesitate to exercise its authority in correcting any irregularities among its members, but in your decisions always be just, and let your justice ever be tempered with mercy, for all of you are but human. The exchange of ideas is of in-

estimable value and should constitute a prominent feature of your regular meetings, either in the form of a paper on a definite subject, or a discussion on the part of the members generally.

Primarily, the nurse and the doctor should have entire confidence in each other in order that satisfactory results may be obtained. However, the nurse is engaged on a case to carry out the orders of the physician in charge, and not her own ideas. Among the doctors whom I know there was one who recently had under his care a patient whose nurse told her repeatedly that what the doctor had ordered for her (telling her it was codeine) was not going to relieve her pain, and what she needed was morphine, and gave it to her. The consequence was that it was very difficult to break this patient of the habit thus acquired. Do you think this doctor could have any further confidence in such a nurse? There are instances, however, in which a nurse must exercise her own judgment until the arrival of the physician, but even here it is better to advise with him by phone and receive instructions.

A nurse must do as she is instructed by the physician in charge, and if she does not approve of the treatment of this particular doctor, it is her privilege to give up the case, but never acquaint the family by statement, act or innuendo that she thinks the doctor is not doing exactly what is right. The custom which it has been my misfortune occasionally to observe, of telling the patient whom you are nursing how the attending physician in another case cares for his patients, cannot be too strongly decried; but I have known this to occur many, many times. A nurse has no right to say anything whatever about any other doctor or his methods. She may, of course, prefer the methods of one physician above those of another, but the only way in which she is privileged to show her preference is by consulting him herself when in need of medical advice. Some nurses go so far as to say they prefer to nurse for this or that doctor. From the lowest possible motive, that of business, this is inexpedient, to say the least. A nurse should have no preference but should go where she is called. I have known nurses on a case for one physician to detail the wonderful results of the treatment of another physician, and as a result, in my own practice, on more than one occasion have had the family ask that I try such and such a remedy that Miss Blank said that Dr. So and So used in a certain case. It seems strange to you, perhaps, that I mention such cases as this, and yet such as these have come under my personal observation. Your ideals should lead you far from such practices, and if you carry out well the orders of your physician, you have done your duty.

On the other hand, the physician in charge should be thoughtful of the well being of the nurse on a case and see that her surroundings, both physical and moral, are what they should

be to the best of his ability, and if she asserts her willingness to do her duty by the patient and the doctor, she will find the profession ready to stand by and protect her always.

A nurse's duty to herself may be summed up briefly in two words—silence and circumspection. A nurse should be no talebearer. She should never intimate in the slightest degree the family life of one patient to another. The family may be for a while amused or interested in what you say, as a choice bit of gossip, but on reflection they will think, "if she tells us about other people, she will talk of us when she nurses in the next family." It is needless to say that you will not be received with a hearty welcome into that family again. People do not care to hear the praises of others sung continually, nor do they care always to hear of their faults. If there is one fault above all others which I may be allowed to attribute to the members of your profession, it is the fault of talking too much. Of course, I do not mean for an instant to say that this is the fault of all nurses, but I am speaking of them as a class.

Many people seem to object to nurses on general principles, but what prejudice exists seems to have been fostered by the isolated cases which are occasionally brought to our attention by gossip of indiscretion on the part of some nurse. This feeling is, of course, not universal nor, fortunately, are the examples common. Let it be remembered by you that a woman is a woman under all circumstances. Let your better natures assert themselves. You have chosen this profession for two reasons: First, that you may make a legitimate living; and, second, that you may be a blessing to humanity, which you can be if you put self aside and keep always in mind the welfare of the patient.

"Oh, woman, in our hours of ease,
Uncertain, coy and hard to please,
And variable as the shade,
By the light, quivering aspen made,
When pain and anguish wring the brow,
A ministering angel thou!"

In your relations with your patients strive always to fulfill the last line of my quotation. When you enter the home to soothe an aching wound or to fight through sleepless nights and days, hand to hand with death, bear in mind that you are arrogating to yourself the most sacred duty on mother, sister or wife, and that these are loth to turn over to you, the modern innovation, the life of one so dear to them. I admonish you to have respect for these feelings and so conduct yourself that the family will gradually lean on you and feel before many days that your presence is indispensable. This feeling you should also inspire in your patient, for many dread a stranger's coming to do for them what they hesitate to let even the dear ones of the family do.

You are to be tender and gentle, but not too sympathetic, for, if you feel too much for your

patient, or show these feelings too plainly, you are in danger of perpetuating the very condition which you were to aid in relieving.

The priest may hear the confessions of a burdened conscience, the pastor may be visited for spiritual comfort; the physician may be sought not only for advice on physical ailments but also in the most sacred family affairs, but to the inspection of all of these many leaves of the book of family life are never turned, but from the nurse nothing is concealed. The financial condition of a household is apparent to you almost at the moment you enter it; the spiritual status and domestic felicity, or only too often, infelicity, soon display the contrasts of their lights and shadows, and it is seldom very long before you hear the rattle of the dry bones of the skeleton in the closet. But ever let your prayer be: "Set a watch, O Jehovah, before my mouth. Keep thou the door of my lips."

Your trust is a sacred one, and what you have seen and heard on these occasions should be as inviolable as the most treasured secrets of your own life. Your position at the bedside grants you a license to converse on subjects not usually mentioned in mixed audiences; use the privilege fearlessly, but when the threshold of the sick room is crossed and your back is turned on its closed door, remember at once that you are women and let your conversation be again in keeping with your sex. At the bedside you are nurse and not merely women; bear this in mind and make yourselves proof against the vulnerability of Juliet to the tender words of her Romeo. When you are off duty you may again without reproach resume the gentleness and nature of women.

I deem it not improper for a moment to suggest that although you are in nursing as a business and as a means of livelihood, you are yet on the higher plane of professionalism. Remember that occasions may arise when you are useful in saving through your professional skill the life of some child in a family which does not live in a marble palace and therefore is but poorly able to remunerate you fully for your services, and I hope you will pardon the illusion, the physician willingly surrenders his claim to a fee that the patient may have the benefit of your attention.

Fortunately most of the cases which you attend end in recovery after longer or shorter periods. In these instances you are the friend of the family and the especial object of esteem of a truly grateful patient. You are remembered long in that home as the alleviator of pain and suffering and the friend who is willing to be called on again and in any emergency. A happy feeling indeed, but it is, of course, vain for us to expect or even hope that all cases will have the same happy ending. The sun cannot shine always; the shadows must cross our paths, and after long and patient waiting and many a sleepless and tiresome vigil, hoing against hope and fighting fate, as it were, we

see the end approaching; and now comes the time and duty which tries you as women; be the ministering angel when anguish wrings the brow! You may have to tell the watching and praying parents that all is over and will necessarily witness the fearful sorrow which appears to wrench the last spark of life away; now is the time to exercise a tender influence and control, supported by a poise of character due to your training, and point those about you to the fact that no character is made without sorrow, and that manhood and womanhood are developed only through reverses. It is in this home that you will be remembered, your tender caress cherished and your name called thrice blessed.

And now after three long years of earnest effort you are to receive these diplomas—certificates of faithful service. Yours is a true and noble calling. Genius dominates and inspires your science. It interests each of you, whether you be an humble nurse unostentatiously performing your arduous labors in some small town, or whether you be some nurse of world-wide fame in the crowded metropolis. The past has bequeathed to you a glorious heritage and destiny. You occupy no mean place in the esteem of mankind, and to feel that in the grand battle of life, though you have won no garlands of fame and your names are unknown beyond the smoke of the cabin door, you have alleviated the wounded, bleeding and sometimes homeless sufferer, is a glorious heritage.

May the morning dawn when every one from the Orient to the Occident, from pole to pole, from mountain to shore, and from shore to the farthest island of the sounding seas, shall feel the impress of the loftiness of your ideals, the nobility of your achievements, the manifold blessings which have been bestowed upon you for grand and humane purposes.

May you as relief bearers to the suffering of your fellow creatures, catching the inspiration of the true and noble nature of your calling, when the clarion call sounds across the gulf of blood that heaves its red waves between the dismembered sections and when the soul cries out in suffering and anguish, stretch out the humanitarian arm of "white handed hope,—the hovering angel, gilt with golden wings," act with a knowledge luscious with the fruit of ripened thought, and thus

"Restore to Earth lost Eden's
Faded bloom, and fling hope's
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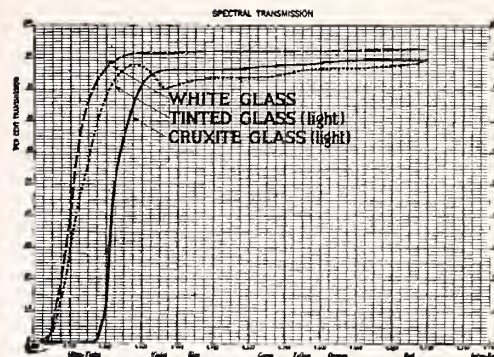
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